الجمهورية اللبنانية
وزارة الصحة العامة

النشرة الاحصائية
Statistical Bulletin
2016

النشرة الإحصائية
دائرة الإحصاءات الحيوية والصحية

تلفون 843745-01
وزارة الصحة العامة- بئر حسن

الجمهورية اللبنانية
وزارة الصحة العامة

World Health Organization
Lebanon

تم طباعة هذه النشرة بدعم من منظمة الصحة العالمية.
This bulletin has been printed with the support of the World Health Organization.

Preface

Health System Resilience in Lebanon: A Consistent Progress amidst Political Instability

Despite the ongoing insecurity climate and socio-political instability for decades, the Lebanese healthcare system has been able to sustain achievements among which, controlling and preventing outbreaks, ensuring universal accessibility to essential quality care, decreasing out of pocket expenditures and lowering of maternal and child mortality (achievement of MDGs 4 and 5)[1]. Five years into the Syrian crisis, the Lebanese health system is still showing considerable resilience, despite the unprecedented increase of demand and strain on the healthcare system. The continuous focus on non-emergency reforms in the health sector shows that progress in achieving strategic goals has been maintained against all odds. It is, hence, noteworthy to look at the main historical stages of the health system development following the 1975-1989 civil war.

The after civil-war years of the 90s represented a period of assessment and planning, while setting basic administrative systems and reorganizing the MOPH. During this period, important studies were conducted including the Households' Health Utilization and Expenditures Survey, the PAPFAM and PAPChild surveys, the National Health Accounts and many others. This endeavor led to identifying problems and setting priorities, of which:

- Improving quality of health services.
- Containing cost of health care and reducing its financial burden on households.
- Reorienting health services towards promotion and prevention and ensuring universal access to Primary Health Care.
- Reducing price and improving quality of pharmaceuticals.

On the other hand, the political system based on power-sharing among political forces and distribution of benefits on a confessional basis, resulted in a widespread practice of favoritism and clientelism in government institutions. This required a professional response paying particular attention to improving governance while focusing on:

- Building a well trained team of health professionals among MOPH staff and find ways for motivation and protecting them from political interferences.
- Introducing innovative governance mechanisms to overcome fragmentation of health financing and provision
- Promoting scientific approach for impartial assessment and performance contracting to face political and confessional favoritism.

The 2000-2010 denoted the era of innovative institutional arrangements, through the involvement of all stakeholders in the execution of the national strategy and programmes implementation. The post 2000 period brought meaningful achievements, such as:

- Enhancing Transparency through Website and Mobile Application development.
- Simplification of procedures through automation of the administrative transactions and implementation of the e-Services platform.
- Improving Accountability using a unified mechanism to receive and follow up on complaints.
- Strengthening primary healthcare and promoting essential drugs.
- Scaling up Epidemiological Surveillance and Response.
- Enforcement of public hospitals autonomy.
- Execution of human resources strategy, that focused on yielding production of nursing graduates. And post-graduate training of health controllers, medical inspectors and PHC physicians.
- Upgrading the registration of pharmaceuticals and revisiting the pricing structure.

[1] "World Health Statistics," World Health Organization, 2013

- Implementation of the WHO Good Governance for Medicines Programme (GGM) and The Quality Assurance of Pharmaceutical Products Programme (QAPPP).
- The accreditation of hospitals and PHC centers.
- The performance contracting with hospitals and containing cost of hospital care, including[2]:
  - The creation of a Unified Beneficiaries Database, its maintenance & updating
  - Development of the visa system, its decentralization and linkage to database.
  - Setting of a financial ceiling in every contract between hospitals and the MOPH.
  - Utilization review and introducing incentives through new payment mechanisms.

Since 2010, studies have been consistently providing evidence on the significant positive impact of health reform policies, and tangible achievements became more and more recognized.
In the **WHO World Health Report 2010**, the case of Lebanon was documented as a success story in how to decrease total health spending in % of GDP by lowering, mainly, out of pocket spending, while at the same time improving health indicators. This validates the sound health policy of strengthening PHC and rationalizing the cost of hospital services, while promoting the MOPH regulatory capacity.

Box 4.2. Lebanon's reforms: improving health system efficiency, increasing coverage and lowering out-of-pocket spending[3]

In 1998 Lebanon spent 12.4% of its GDP on health, more than any other country in the Eastern Mediterranean Region. Out-of-pocket payments, at 60% of total health spending, were also among the highest in the region, constituting a significant obstacle to low-income people. Since then, a series of reforms has been implemented by the Ministry of Health to improve equity and efficiency.
The key components of this reform have been: a revamping of the public-sector primary-care network; improving quality in public hospitals; and improving the rational use of medical technologies and medicines. The latter has included increasing the use of quality-assured generic medicines. The Ministry of Health has also sought to strengthen its leadership and governance functions through a national regulatory authority for health and biomedical technology, an accreditation system for all hospitals, and contracting with private hospitals for specific inpatient services at specified prices. It now has a database that it uses to monitor service provision in public and private health facilities.
Improved quality of services in the public sector, at both the primary and tertiary levels, has resulted in increased utilization, particularly among the poor. Being a more significant provider of services, the Ministry of Health is now better able to negotiate rates for the services it buys from private hospitals and can use the database to track the unit costs of various hospital services.
Utilization of preventive, promotive and curative services, particularly among the poor, has improved since 1998, as have health outcomes. Reduced spending on medicines, combined with other efficiency gains, means that health spending as a share of GDP has fallen from 12.4% to 8.4%. Out-of-pocket spending as a share of total health spending fell from 60% to 44%, increasing the levels of financial risk protection.

Date: 11/26/2010 | WHO Report 2010 on Health Care Financing

By 2013, The **World Health Statistics** listed Lebanon among the only 45 countries in the world to have reached MDG 4 (reducing child mortality by a two thirds), and among the only 16 countries in the world to have achieved MDG 5 (reducing maternal mortality by 75 percent)[4].
In addition, Lebanon became well rated in terms of cost-effectiveness. According to the article published in 2014 by the **Economist Intelligence Unit Healthcare**, "Health outcomes and cost: a 166-country comparison", Lebanon is ranked 32 in the second tier (out of six) in health outcomes, directly following Denmark and preceding the United States. Astonishingly, the cost per health outcome point in Lebanon is $8 USD while, for slightly better outcomes, Denmark is at $73.2 USD per health outcome point and for slightly lower outcomes, the US is at $107.8 USD per outcome point. This evidence proves first, that the Lebanese healthcare system ranks well in terms of outcomes internationally, and second that healthcare is not expensive in Lebanon when compared to countries with similar health outcomes[5].

[2] http://www.moph.gov.lb/en/Pages/17/1275/health-reform-in-lebanon
[3] Health systems financing: the path to universal coverage. World health report 2010. http://www.who.int/whr/2010/en/
[4] "World Health Statistics," World Health Organization, 2013
[5] Health outcomes and cost: A 166-country comparison," The Economist Intelligence Unit, 2014.

Furthermore, the **World Economic Forum[6]** published the Global Competitiveness Report 2016-2017, which confirmed the good performance of the health system in Lebanon, ranked 34 with a score of 6.8 out of a maximum of 7, despite the adverse conditions of other sectors including the social and economic determinants for health, as shown in the same report.

In the **Bloomberg** report on healthiest country index, Lebanon ranked first in the Eastern Mediterranean region with a worldwide rank of 32, a health grade of 74.03 and a health score of 79.55.

As a recognition, **Professor Walid Ammar**, Director General of Health, was awarded the renowned Shousha Foundation Prize by WHO for "his significant contribution to public health in Lebanon, in particular in the areas of primary health care and health policy, and for his efforts in translating research and evidence into policy, programmes and practice, and for bringing together a range of stakeholders to chart a vision for the welfare, rights and health care in an open network model of governance"[7].
In his address in the awarding ceremony Dr. Ammar stated: "If I should attribute progress to one single characteristic of the health system, I would say: innovative governance. The most difficult leadership is that of getting things done by a multitude of stakeholders with different agenda, interests, and beliefs. The Lebanese society is plural and diverse by its different confessions and political groups, a strong private-for-profit sector and an active civil society with powerful NGOs. Considering the very limited resources and weak authority of the public sector, the challenge is how to make all these partners work together to achieve national health goals. The answer is to find a non-hierarchical governance structure, that replaces control and command leadership, by a collaborative leadership to achieve common goals through an open networking type of governance". Dr. Ammar paid tribute to the dedicated MOPH team, and to "people who collaborated with the Ministry of Health to make progress. These are health professionals working in different institutional settings, guided by science, professional ethics and human values. Those actors in public and private sectors, despite the depressing political climate and unfavorable working conditions, are contributing to alleviate pain, reduce morbidity and mortality, improve quality of life and promote social progress".

[6] The Global Competitiveness Report 2016–2017. World Economic Forum. https://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1/
[7] Regional Committee for the Eastern Mediterranean, WHO, Sixty-third session. EM/RC63/INF.DOC.7Rev.1, September 2016.

Table of Contents

	Page
Table of contents	
A-Summary Tables	
Table A.1: Selected indicators of Lebanon, 2014- 2016	3
B-Population and Vital Statistics	
Table B.1: Number of registered Lebanese births by month, Qada and gender, 2016	4
Table B.2: Number of registered Lebanese deaths by month, Qada and gender, 2016	5
Table B.3: Resident population* distribution by age group and gender, 2016	6
Table B.4: Resident population* distribution by age group and Qada, 2016	7
Table B.5: Resident population* distribution by Mohafaza and Qada, 2010-2016	8
Table B.6: Resident population* distribution by age group, Qada and some basic indicators, 2016	9
Table B.7: Proportion of deaths by age group and gender in Beirut	10
Table B.8: Proportion of deaths by cause of death according to ICD-10 chapters in Beirut	11
C-MOPH Services Utilization Data	
Graph C.1: Hospitals contracting with MOPH by Mohafaza and type, 2016	12
Graph C.2: MOPH subsidized admissions by Mohafaza and type of hospital, 2016	13
Graph C.3: MOPH subsidized in-patients by Qada and type of hospital, 2016	14
Graph C.4: MOPH subsidized in-patients by Qada of hospital and Qada of origin, 2016	15
Graph C.5: The evolution of MOPH subsidized admissions in public and private hospitals between 2006 and 2016	16
Graph C.6: MOPH subsidized hospital cases* by ICD10 category of diagnosis, 2016 (N=348,852)	17
Graph C.7: MOPH subsidized hospital cases* by ICD10 category of diagnosis and gender, 2016 (N = 348,852)	18
Table C.1: MOPH subsidized hospital cases* by category of diagnosis and gender, 2016	19
Graph C.8: Total and incident cases benefiting from the DDC* by Qada, 2016	26
D-Epidemiology	
Graph D.1: MOPH subsidized hospitalized neoplasms cases* by gender and age group, 2016	27
Graph D.2: MOPH subsidized hospitalized* cardiovascular cases** by gender and age group, 2016	28
Graph D.3: MOPH subsidized hospitalized* diabetes mellitus cases** by gender and age group, 2016	29
Graph D.4: The trend in tuberculosis cases by nationality between 2012 and 2016	30
Graph D.5: Proportion of tuberculosis treatment success by nationality, 2016	31
Table D.1: HIV/AIDS estimated incidence in Lebanon, 2016	32
Graph D.6: The trend in incident cases of HIV/AIDS between 2012 and 2016	33
Graph D.7: Reported cases of malaria by gender, 2016	34
Graph D.8: Confirmed malaria cases by Mohafaza, 2016	34
Graph D.9: Reported cases of malaria by age group, 2016	34
Graph D.10: Hip fracture cases* and incidence rate among MOPH eligible population by gender, 2011-2015	35
E-Vaccination and Campaigns	
Graph E.1: National immunization coverage rates by polio, measles and pentavalent vaccines, 2012-2016	36
F-Diseases' Surveillance Data	
Table F.1: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by month, 2016	37

Table of Contents

Table F.2: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by age groups and gender, 2016	**38**
Table F.3: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by Mohafaza, 2016	**39**
G-Vital Data Observatory "VDO" previously known as "MNMNS"	
Table G.1: Vital Data Observatory (VDO) statistics* by Qada and nationality, 2016	**40**
H-Medication for Chronic Illnesses Program: the YMCA Records	
Graph H.1: Proportion of beneficiaries from the MOPH chronic drugs' program by age group and medical condition, 2016	**41**
Graph H.2: Distribution of chronic conditions among users of chronic drugs, 2016	**42**
Graph H.3: Socio-medical centers and beneficiaries per center by Mohafaza, 2016	**43**
Graph H.4: Proportion of patients suffering from chronic conditions, 2016	**44**
Graph H.5: Proportion of patients taking medications, 2016	**45**
I-National Health Accounts	
Table I.1: National health accounts of Lebanon, 2012-Summary table	**46**
Acknowledgments	

This publication is the annual compilation of data available at the Ministry of Public Health, it is free of charge and can be accessed as well on the ministry's website. Although the statistics department endeavors to ensure accuracy of information in these documents, it cannot guarantee 100% accuracy nor can it be held liable for errors that may occur. However, the data provided herein are accurate up to the availability of baseline information.

For comments and suggestions,
kindly contact:

Hilda Harb, MPH
Head of Statistics Department
Ministry of Public Health

Beirut, Lebanon
Tel/Fax: 00961-1-843 745
E-mail: statistics@moph.gov.lb
Website: www.moph.gov.lb

Table A.1: Selected indicators of Lebanon, 2014- 2016

	Unit	2014	2015	2016
Health Determinants and Risks				
Demographic and socioeconomic determinants				
Population Estimate*	1000 citizens	4,231	4,292	4,356
Number of registered births		88,704	85,453	88,996
Number of registered deaths		25,117	25,275	24,617
Crude Birth Rate	per 1000 population	21.0	19.9	20.4
Crude Death Rate	per 1000 population	5.9	5.9	5.7
Population Growth Rate		1.5	1.4	1.5
Population by Age				
< 15	percent	24.6	24.6	24.6
65+	percent	9.7	9.7	9.7
Risk Factors				
Low birth weight (less than 2500 g) (%)	percent	8.1	8.8	9.4
Caesarian delivery rate (%)	percent	45.6	46.7	47
Health Status				
Life Expectancy and Mortality				
Life expectancy at birth, Total Population				81.24 (2012)
Life expectancy at birth, Male				80.27 (2012)
Life expectancy at birth, Female				82.11 (2012)
Infant Mortality Rate	per 1000 Live Births			6.4
Less than five Mortality Rate	per 1000 Live Births			8.5
Maternal Mortality Ratio	per 100,000 Live Births	9	14	21
Morbidity				
Measles		235	39	44
Tetanus		0	3	2
Neonatal Tetanus		0	0	0
Acute Flaccid Paralysis		53	76	123
Hepatitis A		2582	985	519
Hepatitis B		218	390	367
Hepatitis C		100	136	116
Mumps		736	1,496	486
Brucellosis		252	389	402
Typhoid Fever		546	576	598
AIDS		38	22	21
Health System Response				
Health Financing				
Total GDP	Billion Leb. Pounds		76,518	76,518 (2015)
Allocated to MOPH from Total Gov Budget	percent			2.75
Annual Budget of MOPH	Billion Leb. Pounds			680
Annual Budget of MOPH per capita	$US			104
Total Health Expenditure (THE) per capita	$US			752 (2012)
THE as % GDP	percent			7.17 (2012)
Out Of Pocket Expenditure as % THE	percent			37.34 (2012)
Health Workforce	**per 10,000 population**			
Physicians		30.7	32.0	31.0
Dentists		12.9	12.9	15.1
Pharmacists		17.5	17.7	18.2
Nursing and Midwifery Personnel		33.0	33.4	34.2
Hospital Beds		34.2	33.7	27.3
Medicines and Medical devices	**per million population**			
Density of High Tech Equipment				260 (2012)
Service Coverage				
Infants Fully Immunized-DPT	percent immunized	97	91	90
Infants Fully Immunized-OPV	percent immunized	97	90	90.39
Infants Fully Immunized-Measles	percent immunized	98	91	90
Infants Fully Immunized-Hepatitis B	percent immunized	97	91	90
Married Women Using Contraceptives	percent			54 (2009)

Sources of Information

Vital Data Observatory (VDO), MOPH.		
Department of Projects & Programs, MOPH.		Department of Vital and Health Statistics, MOPH.
Expanded Program on Immunization, MOPH.		Economic Accounts of Lebanon.
Estimated Population from the 2004 and 2007 Household surveys (CAS) in addition to Registered Births and Deaths at Department of Statistics.		MICS3, 2009. CAS/UNICEF
National Health Accounts 2012, MOPH.	National AIDS Program (NAP), MOPH.	Syndicate Figures calculated for the given population.
Epidemiological Surveillance Unit, MOPH.		Government Budget أرقام الموازنة العامة

** Excluding Palestenian camps and Syrian refugees.*

Table B.1: Number of registered Lebanese births by month, Qada and gender, 2016

Qada	Jan		Feb		Mar		April		May		June		July		Aug		Sep		Oct		Nov		Dec		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T
Aakkar	527	502	508	467	462	471	494	466	346	382	462	419	542	504	595	575	561	524	553	521	452	459	472	453	5,974	5,743	11,717
Minieh-Danniyeh	229	244	180	167	219	197	163	144	129	133	239	197	225	219	194	173	190	181	237	262	211	205	181	200	2,397	2,322	4,719
Tripoli	274	254	232	222	272	261	250	218	175	156	220	206	230	211	241	217	279	264	253	259	297	269	256	240	2,979	2,777	5,756
Zgharta	74	72	48	46	79	82	88	68	40	42	61	49	59	71	80	78	78	56	108	91	80	63	62	50	857	768	1,625
Koura	30	36	29	19	35	32	28	34	23	22	40	26	48	41	46	35	22	24	43	49	114	103	74	73	532	494	1,026
Bcharreh	29	15	26	27	33	32	29	28	23	14	26	21	28	33	31	21	22	23	26	19	30	24	19	19	322	276	598
Batroun	34	34	26	26	34	30	38	38	18	24	42	36	45	38	41	46	44	40	46	61	45	51	36	46	449	470	919
Hermel	93	68	63	59	103	106	97	68	80	55	108	102	69	76	98	81	94	89	97	78	72	90	73	81	1,047	953	2,000
Baalbek	338	348	391	339	337	365	328	324	392	326	405	403	478	429	452	463	447	383	436	376	413	373	422	395	4,839	4,524	9,363
Zahleh	191	168	172	166	171	152	160	154	154	154	176	174	204	169	230	188	219	182	214	181	174	139	202	158	2,267	1,985	4,252
Rachaiya	40	29	29	21	86	73	35	31	26	33	31	33	54	49	40	41	40	57	68	68	102	89	40	44	591	568	1,159
West Beqaa	107	103	119	121	127	126	120	98	93	103	109	85	106	108	126	115	135	89	131	141	115	106	116	89	1,404	1,284	2,688
Nabatiyeh	171	152	145	160	184	168	166	187	162	143	165	156	179	172	176	160	188	161	209	206	181	184	148	141	2,074	1,990	4,064
Hasbaiya	42	50	39	42	34	33	46	45	46	44	44	48	44	33	47	54	54	61	60	44	49	46	43	37	548	537	1,085
Marjaayoun	114	104	134	127	136	142	128	119	99	100	129	125	151	117	162	157	147	149	106	121	142	144	120	108	1,568	1,513	3,081
Bent Jbayl	142	153	165	143	176	193	180	170	137	114	176	136	168	181	211	185	197	176	172	174	162	185	169	189	2,055	1,999	4,054
Saida	141	127	200	159	226	200	161	145	164	138	138	146	180	163	130	163	195	194	224	229	168	176	172	135	2,099	1,975	4,074
Sour	200	194	218	213	290	262	184	160	176	151	299	310	225	233	263	262	250	236	251	252	204	208	193	179	2,753	2,660	5,413
Jezzine	36	27	30	40	33	25	28	29	24	25	47	57	37	30	49	37	38	36	41	45	53	52	29	29	445	432	877
Jbayl	61	51	53	60	67	53	58	49	62	53	57	62	56	75	96	68	60	57	48	65	55	77	47	56	720	726	1,446
Keserwan	58	37	55	53	49	55	46	61	51	56	58	54	53	44	67	68	75	41	78	58	59	46	55	46	704	619	1,323
Matn	57	58	94	67	76	103	73	85	67	95	108	95	94	78	101	118	107	99	114	115	98	86	87	82	1,076	1,081	2,157
Baabda	85	103	120	91	102	99	82	99	103	114	122	82	85	117	123	136	101	81	98	103	122	96	118	106	1,261	1,227	2,488
Aaley	60	68	81	83	93	74	87	88	61	60	89	78	109	97	117	121	92	89	104	91	120	94	69	66	1,082	1,009	2,091
Chouf	133	136	129	136	138	146	125	129	128	135	245	218	208	186	169	173	193	159	191	189	148	142	125	134	1,932	1,883	3,815
Beirut	308	286	310	275	352	329	303	231	246	212	275	282	305	304	354	313	346	341	330	314	345	292	274	279	3,748	3,458	7,206
Total	3,574	3,419	3,596	3,329	3,914	3,809	3,497	3,268	3,025	2,884	3,871	3,600	3,982	3,778	4,239	4,048	4,174	3,792	4,238	4,112	4,011	3,799	3,602	3,435	45,723	43,273	88,996

Source: Ministry of Interior records reported to the Ministry of Health through district offices.

Table B.2: Number of registered Lebanese deaths by month, Qada and gender, 2016

Qada	Jan		Feb		Mar		April		May		June		July		Aug		Sep		Oct		Nov		Dec		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T
Aakkar	90	84	98	72	77	78	81	44	65	43	64	60	64	50	74	77	73	56	90	66	83	71	96	85	955	786	1,741
Minieh-Danniyeh	29	27	42	39	38	31	34	19	25	15	31	25	23	15	24	16	47	22	41	34	40	24	37	31	411	298	709
Tripoli	77	62	65	57	69	64	54	60	35	37	62	53	47	50	47	48	49	44	52	44	59	59	65	62	681	640	1,321
Zgharta	30	22	26	22	26	24	35	21	18	11	23	19	18	14	19	17	24	21	22	16	21	9	44	26	306	222	528
Koura	19	17	29	16	22	18	17	11	15	12	19	7	18	10	19	11	25	12	28	20	26	23	23	13	260	170	430
Bcharreh	11	13	15	20	22	19	10	7	9	12	5	8	16	7	12	5	12	7	25	16	16	12	13	6	166	132	298
Batroun	21	21	23	19	27	18	24	18	21	15	13	15	21	15	17	20	19	14	34	19	31	22	24	16	275	212	487
Hermel	14	12	21	8	11	18	10	26	17	11	15	10	6	2	17	14	24	10	27	17	17	11	14	10	193	149	342
Baalbek	88	73	97	89	94	65	97	56	65	56	79	58	92	54	87	52	67	53	96	54	79	79	105	75	1,046	764	1,810
Zahleh	72	47	59	58	58	44	56	54	37	28	67	61	44	36	57	39	66	42	50	48	70	52	34	26	670	535	1,205
Rachaiya	16	14	12	12	22	17	13	9	13	8	5	6	5	8	4	6	15	19	9	15	22	12	11	8	147	134	281
West Beqaa	28	26	42	18	22	18	24	16	21	29	21	20	30	25	28	19	24	20	35	27	25	22	22	33	322	273	595
Nabatiyeh	55	36	54	37	50	38	31	37	33	28	47	33	35	32	47	27	35	37	21	23	44	34	40	41	492	403	895
Hasbaiya	23	23	16	8	14	10	5	10	11	10	11	10	15	9	13	10	13	15	15	12	10	6	9	4	155	127	282
Marjaayoun	46	38	29	23	36	30	37	32	21	26	27	20	25	14	28	24	32	31	22	23	37	35	34	21	374	317	691
Bent Jbayl	42	34	45	35	59	36	54	35	27	22	41	31	34	30	32	32	33	28	32	28	42	36	49	43	490	390	880
Saida	52	41	33	28	63	54	42	45	49	35	52	34	36	37	32	28	49	39	64	45	54	49	42	33	568	468	1,036
Sour	67	45	66	43	57	47	56	39	33	24	52	54	41	40	55	45	49	28	41	50	60	39	59	43	636	497	1,133
Jezzine	22	19	21	20	26	21	13	14	15	14	23	18	14	21	13	15	19	19	20	21	18	24	22	31	226	237	463
Jbayl	30	23	36	33	24	26	26	25	21	23	14	20	19	20	25	25	23	16	35	19	37	23	34	32	324	285	609
Keserwan	33	38	35	39	38	37	32	29	20	18	34	28	31	21	38	17	32	31	37	30	37	22	36	18	403	328	731
Matn	70	72	86	55	76	51	46	42	53	39	70	53	45	44	61	60	62	44	73	61	53	60	55	40	750	621	1,371
Baabda	69	62	61	52	66	56	64	47	49	51	44	46	51	54	51	30	48	28	61	54	58	41	47	47	669	568	1,237
Aaley	47	31	55	44	54	35	34	36	28	40	42	46	42	38	41	32	43	29	38	34	45	49	24	29	493	443	936
Chouf	62	68	93	59	56	44	52	54	52	45	87	88	60	47	53	60	59	56	56	67	67	55	60	72	757	715	1,472
Beirut	159	140	150	166	170	153	134	120	105	90	142	121	98	111	124	120	132	130	143	123	133	108	148	114	1,638	1,496	3,134
Total	1,272	1,088	1,309	1,072	1,277	1,052	1,081	906	858	742	1,090	944	930	804	1,018	849	1,074	851	1,167	966	1,184	977	1,147	959	13,407	11,210	24,617

Source: Ministry of Interior records reported to the Ministry of Health through district offices.

Table B.3: Resident population distribution by age group and gender, 2016*

Age groups	Percent			Population 2016		
	M	F	T	M	F	T
0-4	3.6	3.3	6.9	156,813	143,745	300,558
5-9	4.3	4.1	8.3	185,126	176,414	361,541
10-14	4.9	4.5	9.4	213,440	196,016	409,456
15-19	5.2	4.5	9.8	227,814	196,887	424,702
20-24	5.1	4.7	9.8	222,152	204,728	426,879
25-29	3.9	4.2	8.1	169,881	182,948	352,829
30-34	3.5	3.8	7.4	154,199	166,396	320,595
35-39	3.0	3.7	6.7	130,677	161,169	291,846
40-44	2.7	3.5	6.2	118,916	152,457	271,373
45-49	2.5	3.0	5.6	110,205	130,677	240,882
50-54	2.2	2.5	4.8	97,137	108,898	206,035
55-59	1.8	2.0	3.8	78,406	87,118	165,525
60-64	1.7	2.0	3.7	74,051	87,118	161,169
65-69	1.6	1.7	3.2	69,695	74,051	143,745
70-74	1.4	1.4	2.8	60,983	60,983	121,966
75-79	1.0	0.9	1.9	43,559	39,203	82,762
80-84	0.6	0.6	1.2	26,135	26,135	52,271
85+	0.3	0.2	0.5	13,068	8,712	21,780
Total	**49.4**	**50.6**	**100.0**	**2,152,257**	**2,203,656**	**4,355,913**

**Excluding Palestinian camps and Syrian refugees.*

Source: Population estimate based on latest baseline data and age proportions available from the Central Administration of Statistics (CAS).

Table B.4: Resident population* distribution by age group and Qada, 2016

Qada	%	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
Aakkar	7.04	21,165	25,459	28,833	29,906	30,060	24,845	22,576	20,551	19,109	16,962	14,508	11,656	11,349	10,122	8,589	5,828	3,681	1,534	306,733
Minieh-Danniyeh	3.30	9,929	11,943	13,526	14,030	14,102	11,656	10,591	9,641	8,965	7,957	6,806	5,468	5,324	4,749	4,029	2,734	1,727	719	143,897
Tripoli	6.74	20,256	24,366	27,596	28,623	28,770	23,779	21,607	19,669	18,289	16,234	13,886	11,156	10,862	9,688	8,220	5,578	3,523	1,468	293,571
Zgharta	1.50	4,523	5,441	6,162	6,392	6,424	5,310	4,825	4,392	4,084	3,625	3,101	2,491	2,426	2,163	1,836	1,246	787	328	65,555
Koura	1.35	4,053	4,875	5,521	5,727	5,756	4,757	4,323	3,935	3,659	3,248	2,778	2,232	2,173	1,938	1,645	1,116	705	294	58,734
Bcharreh	0.58	1,751	2,106	2,385	2,474	2,486	2,055	1,867	1,700	1,581	1,403	1,200	964	939	837	710	482	304	127	25,370
Batroun	1.04	3,112	3,743	4,239	4,397	4,419	3,653	3,319	3,021	2,809	2,494	2,133	1,714	1,668	1,488	1,263	857	541	225	45,094
	21.56																			
Hermel	1.42	4,275	5,142	5,824	6,041	6,072	5,018	4,560	4,151	3,860	3,426	2,930	2,354	2,292	2,045	1,735	1,177	743	310	61,955
Baalbek	6.01	18,073	21,740	24,621	25,538	25,669	21,216	19,278	17,549	16,318	14,485	12,389	9,953	9,691	8,644	7,334	4,977	3,143	1,310	261,928
Zahleh	3.97	11,934	14,355	16,257	16,863	16,949	14,009	12,729	11,588	10,775	9,564	8,181	6,572	6,399	5,707	4,843	3,286	2,075	865	172,950
Rachaiya	0.86	2,596	3,123	3,537	3,669	3,688	3,048	2,770	2,521	2,344	2,081	1,780	1,430	1,392	1,242	1,054	715	452	188	37,629
West Beqaa	1.99	5,969	7,180	8,131	8,434	8,477	7,007	6,366	5,796	5,389	4,784	4,091	3,287	3,201	2,855	2,422	1,644	1,038	433	86,501
	14.26																			
Nabatiyeh	2.95	8,856	10,653	12,064	12,514	12,578	10,396	9,446	8,599	7,996	7,097	6,071	4,877	4,749	4,235	3,594	2,439	1,540	642	128,345
Hasbaiya	0.72	2,157	2,595	2,939	3,048	3,064	2,533	2,301	2,095	1,948	1,729	1,479	1,188	1,157	1,032	875	594	375	156	31,266
Marjaayoun	1.74	5,226	6,286	7,119	7,385	7,422	6,135	5,574	5,075	4,719	4,188	3,582	2,878	2,802	2,499	2,121	1,439	909	379	75,739
Bent Jbayl	2.17	6,517	7,840	8,879	9,209	9,256	7,651	6,952	6,328	5,884	5,223	4,468	3,589	3,495	3,117	2,645	1,795	1,133	472	94,453
	7.57																			
Saida	5.53	16,630	20,004	22,656	23,499	23,620	19,522	17,739	16,148	15,015	13,328	11,400	9,159	8,918	7,954	6,748	4,579	2,892	1,205	241,017
Sour	5.48	16,476	19,819	22,446	23,282	23,401	19,342	17,575	15,999	14,877	13,205	11,295	9,074	8,835	7,880	6,686	4,537	2,865	1,194	238,789
Jezzine	0.65	1,945	2,340	2,650	2,748	2,762	2,283	2,075	1,889	1,756	1,559	1,333	1,071	1,043	930	789	536	338	141	28,189
	11.66																			
Jbayl	2.11	6,349	7,637	8,649	8,972	9,018	7,453	6,772	6,165	5,733	5,088	4,352	3,497	3,405	3,037	2,576	1,748	1,104	460	92,016
Keserwan	3.86	11,604	13,959	15,809	16,397	16,481	13,622	12,378	11,268	10,477	9,300	7,955	6,391	6,223	5,550	4,709	3,195	2,018	841	168,176
Matn	11.11	33,406	40,183	45,509	47,203	47,446	39,215	35,633	32,437	30,162	26,773	22,900	18,397	17,913	15,977	13,556	9,199	5,810	2,421	484,138
Baabda	11.21	33,701	40,539	45,911	47,621	47,865	39,562	35,947	32,724	30,428	27,009	23,102	18,560	18,071	16,118	13,676	9,280	5,861	2,442	488,417
Aaley	3.20	9,609	11,558	13,090	13,577	13,647	11,280	10,249	9,330	8,676	7,701	6,587	5,292	5,152	4,595	3,899	2,646	1,671	696	139,254
Chouf	4.10	12,333	14,836	16,802	17,428	17,517	14,478	13,156	11,976	11,136	9,885	8,455	6,792	6,614	5,899	5,005	3,396	2,145	894	178,744
	35.60																			
Beirut	9.35	28,114	33,819	38,301	39,727	39,930	33,004	29,989	27,299	25,384	22,532	19,273	15,483	15,076	13,446	11,409	7,742	4,889	2,037	407,453
	9.35																			
Total	100.00	300,558	361,541	409,456	424,702	426,879	352,829	320,595	291,846	271,373	240,882	206,035	165,525	161,169	143,745	121,966	82,762	52,271	21,780	4,355,913

*Excluding Palestinian camps and Syrian refugees.

Source: Population estimate based on latest baseline data and age proportions available from the Central Administration of Statistics (CAS).

Table B.5: Resident population distribution by Mohafaza and Qada, 2010-2016*

Mohafaza	Qada	Percent of Total Population, 2010	Population 2010	Population 2011	Population 2012	Population 2013	Population 2014	Population 2015	Percent of Total Population, 2015	Population 2016	Percent of Total Population,2016
North	Aakkar	6.30	249,642	258,788	268,191	277,260	286,866	296,757	6.91	306,733	7.04
	Minieh-Danniyeh	3.07	121,722	125,429	129,116	132,482	136,249	139,887	3.26	143,897	3.30
	Tripoli	6.74	267,159	272,162	276,827	280,993	285,081	289,136	6.74	293,571	6.74
	Zgharta	1.48	58,479	60,331	61,570	62,520	63,437	64,458	1.50	65,555	1.50
	Koura	1.42	56,384	57,186	57,629	57,679	57,839	58,138	1.35	58,734	1.35
	Bcharreh	0.54	21,559	22,626	23,587	24,139	24,686	25,070	0.58	25,370	0.58
	Batroun	1.05	41,793	42,569	43,108	43,603	44,166	44,662	1.04	45,094	1.04
Total		**20.62**	**816,739**	**839,092**	**860,029**	**878,677**	**898,325**	**918,109**	**21.39**	**938,955**	**21.56**
Beqaa	Hermel	1.34	53,052	54,577	56,212	57,541	58,854	60,297	1.41	61,955	1.42
	Baalbek	5.51	218,285	226,566	231,648	240,242	247,533	254,375	5.93	261,928	6.01
	Zahleh	3.90	154,642	157,894	160,925	163,841	166,841	169,903	3.96	172,950	3.97
	Rachaiya	0.82	32,617	33,657	34,466	35,107	36,020	36,751	0.86	37,629	0.86
	West Beqaa	1.89	74,709	76,917	78,916	80,803	82,684	84,408	1.97	86,501	1.99
Total		**13.46**	**533,305**	**549,611**	**562,167**	**577,534**	**591,932**	**605,734**	**14.11**	**620,963**	**14.26**
Nabatiyeh	Nabatiyeh	2.95	116,703	117,871	119,214	120,352	122,345	125,176	2.92	128,345	2.95
	Hasbaiya	0.66	26,070	26,944	27,988	28,866	29,685	30,463	0.71	31,266	0.72
	Marjaayoun	1.51	59,676	63,037	66,441	68,771	71,128	73,349	1.71	75,739	1.74
	Bent Jbayl	1.90	75,237	79,038	82,345	85,512	88,444	91,279	2.13	94,453	2.17
Total		**7.01**	**277,686**	**286,890**	**295,988**	**303,501**	**311,602**	**320,267**	**7.46**	**329,803**	**7.57**
South	Saida	5.31	210,190	217,616	224,624	230,653	235,037	237,979	5.55	241,017	5.53
	Sour	5.34	211,601	216,368	221,040	225,539	230,247	234,509	5.46	238,789	5.48
	Jezzine	0.64	25,178	25,826	26,380	26,860	27,346	27,775	0.65	28,189	0.65
Total		**11.28**	**446,969**	**459,810**	**472,044**	**483,052**	**492,630**	**500,263**	**11.66**	**507,995**	**11.66**
Mount Lebanon	Jbayl	2.19	86,659	87,770	88,650	89,591	90,432	91,179	2.12	92,016	2.11
	Keserwan	4.15	164,489	165,216	165,875	166,480	167,039	167,584	3.90	168,176	3.86
	Matn	12.10	479,510	480,197	480,936	481,535	482,535	483,352	11.26	484,138	11.11
	Baabda	12.15	481,423	482,690	483,777	484,861	486,312	487,166	11.35	488,417	11.21
	Aaley	3.34	132,503	133,651	134,791	135,865	137,065	138,099	3.22	139,254	3.20
	Chouf	4.14	164,074	166,799	169,331	171,794	174,181	176,401	4.11	178,744	4.10
Total		**38.08**	**1,508,658**	**1,516,323**	**1,523,360**	**1,530,126**	**1,537,564**	**1,543,781**	**35.97**	**1,550,745**	**35.60**
Beirut	Beirut	9.55	378,464	384,725	390,238	394,880	399,304	403,381	9.40	407,453	9.35
Total		**9.55**	**378,464**	**384,725**	**390,238**	**394,880**	**399,304**	**403,381**	**9.40**	**407,453**	**9.35**
Total Population		**100.00**	**3,961,820**	**4,036,450**	**4,103,825**	**4,167,769**	**4,231,356**	**4,291,534**	**100**	**4,355,913**	**100**

**Excluding Palestinian camps and Syrian refugees.*

Source: Population estimate based on latest baseline data and age proportions available from the Central Administration of Statistics (CAS) in addition to birth and death records available from the Ministry of Interior.

Table B.6: Resident population distribution by age group, Qada and some basic indicators, 2016*

Qada	0-4	5-9	10-14	<15years	>65years	Active Population**	Total Population	Births	Deaths	CBR	CDR	RNI
Aakkar	21,165	25,459	28,833	75,456	29,753	201,524	306,733	11,717	1,741	38.20	5.68	3.25
Minieh-Danniyeh	9,929	11,943	13,526	35,399	13,958	94,540	143,897	4,719	709	32.79	4.93	2.79
Tripoli	20,256	24,366	27,596	72,218	28,476	192,876	293,571	5,756	1,321	19.61	4.50	1.51
Zgharta	4,523	5,441	6,162	16,127	6,359	43,070	65,555	1,625	528	24.79	8.05	1.67
Koura	4,053	4,875	5,521	14,449	5,697	38,588	58,734	1,026	430	17.47	7.32	1.01
Bcharreh	1,751	2,106	2,385	6,241	2,461	16,668	25,370	598	298	23.57	11.75	1.18
Batroun	3,112	3,743	4,239	11,093	4,374	29,627	45,094	919	487	20.38	10.80	0.96
Hermel	4,275	5,142	5,824	15,241	6,010	40,704	61,955	2,000	342	32.28	5.52	2.68
Baalbek	18,073	21,740	24,621	64,434	25,407	172,086	261,928	9,363	1,810	35.75	6.91	2.88
Zahleh	11,934	14,355	16,257	42,546	16,776	113,628	172,950	4,252	1,205	24.59	6.97	1.76
Rachaiya	2,596	3,123	3,537	9,257	3,650	24,722	37,629	1,159	281	30.80	7.47	2.33
West Beqaa	5,969	7,180	8,131	21,279	8,391	56,831	86,501	2,688	595	31.07	6.88	2.42
Nabatiyeh	8,856	10,653	12,064	31,573	12,449	84,323	128,345	4,064	895	31.66	6.97	2.47
Hasbaiya	2,157	2,595	2,939	7,691	3,033	20,541	31,266	1,085	282	34.70	9.02	2.57
Marjaayoun	5,226	6,286	7,119	18,632	7,347	49,760	75,739	3,081	691	40.68	9.12	3.16
Bent Jbayl	6,517	7,840	8,879	23,235	9,162	62,056	94,453	4,054	880	42.92	9.32	3.36
Saida	16,630	20,004	22,656	59,290	23,379	158,348	241,017	4,074	1,036	16.90	4.30	1.26
Sour	16,476	19,819	22,446	58,742	23,163	156,884	238,789	5,413	1,133	22.67	4.74	1.79
Jezzine	1,945	2,340	2,650	6,934	2,734	18,520	28,189	877	463	31.11	16.43	1.47
Jbayl	6,349	7,637	8,649	22,636	8,926	60,454	92,016	1,446	609	15.71	6.62	0.91
Keserwan	11,604	13,959	15,809	41,371	16,313	110,492	168,176	1,323	731	7.87	4.35	0.35
Matn	33,406	40,183	45,509	119,098	46,961	318,079	484,138	2,157	1,371	4.46	2.83	0.16
Baabda	33,701	40,539	45,911	120,151	47,376	320,890	488,417	2,488	1,237	5.09	2.53	0.26
Aaley	9,609	11,558	13,090	34,257	13,508	91,490	139,254	2,091	936	15.02	6.72	0.83
Chouf	12,333	14,836	16,802	43,971	17,338	117,435	178,744	3,815	1,472	21.34	8.24	1.31
Beirut	28,114	33,819	38,301	100,233	39,523	267,697	407,453	7,206	3,134	17.69	7.69	1.00
Total	**300,558**	**361,541**	**409,456**	**1,071,555**	**422,524**	**2,861,835**	**4,355,913**	**88,996**	**24,617**	**20.43**	**5.65**	**1.48**

**Excluding Palestinian camps and Syrian refugees.*

***Active Population: Population between 15-65 years of age regardless of their employment status.*

Source: Population estimate based on latest baseline data and age proportions available from the Central Administration of Statistics (CAS) in addition to birth and death records available from the Ministry of Interior.

Table B.7 : Proportion of deaths by age group and gender in Beirut.

Age groups	Percent		
	M	F	T
0-4	1.4	1.2	1.3
5-9	0.3	0.1	0.2
10-14	0.3	0.2	0.2
15-19	0.9	0.1	0.5
20-24	1.4	0.5	0.9
25-29	1.0	0.7	0.9
30-34	1.2	0.6	0.9
35-39	1.3	0.8	1.0
40-44	1.5	1.1	1.3
45-49	2.2	1.7	1.9
50-54	4.1	2.7	3.4
55-59	6.2	4.3	5.3
60-64	8.0	6.7	7.4
65-69	9.0	6.9	8.0
70-74	13.0	9.7	11.4
75-79	14.6	14.9	14.7
80-84	15.3	17.6	16.4
85+	18.5	30.5	24.1
Total	***100.0***	***100.0***	***100.0***

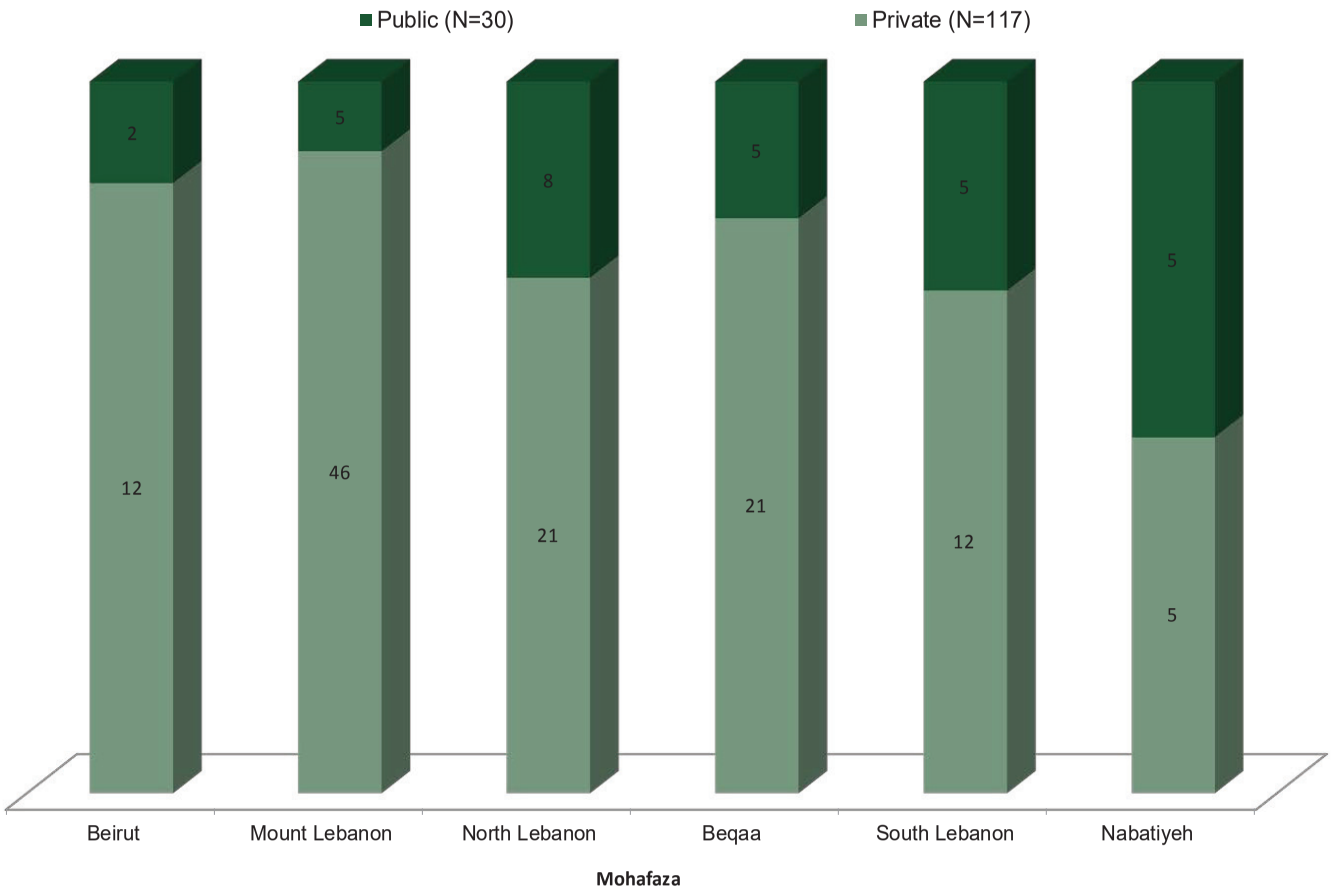
Source: Ministry of interior and municipalities in addition to Governorate of Beirut, MOPH.
An analysis of 4,178 certificate of death in Beirut Governorate.

Table B.8: Proportion of deaths by cause of death according to ICD-10 chapters in Beirut.

Cause of death (COD)	Percent			
	ICD-10 Chapter	COD I	COD II	COD III
Diseases of the circulatory system	(I00-I99)	66	20	6
Neoplasms	(C00-D48)	4	8	2
Diseases of the respiratory system	(J00-J98)	2	6	2
External cause of mortality	(V01-Y89)	1	1	1
Certain infectious and parasitic diseases	(A00-B99)	1	2	1
Diseases of the genitourinary system	(N00-N99)	1	2	2
Injury, poisoning and certain other consequences of external causes	(S00-T98)	0	0	0
Symptoms and signs not elsewhere classified	(R00-R99)	0	0	0
Diseases of the digestive system	(K00-K92)	0	1	1
Endocrine, nutritional and metabolic diseases	(E00-E89)	0	1	1
Mental and behavioral disorders	(F01-F99)	0	0	0
Diseases of the nervous system	(G00-G98)	0	0	0
Certain conditions originating in the perinatal period	(P00-P96)	0	0	0
Diseases of blood and blood forming organs	(D50-D89)	0	0	0
Congenital malformations	(Q00-Q99)	0	0	0
Diseases of the eye and adnexa	(H00-H59)	0	0	0
Diseases of the ear and mastoid process	(H60-H95)	0	0	0
Diseases of skin and subcutaneous tissue	(L00-L98)	0	0	0
Diseases of the musculoskeletal system & connective tissue	(M00-M99)	0	0	0
Pregnancy, childbirth, and the puerperium	(O00-O99)	0	0	0
Factors influencing health status and contact with health services	(Z00-Z99)	0	0	0
Not Defined		25	58	85
Total		100.0	100.0	100.0

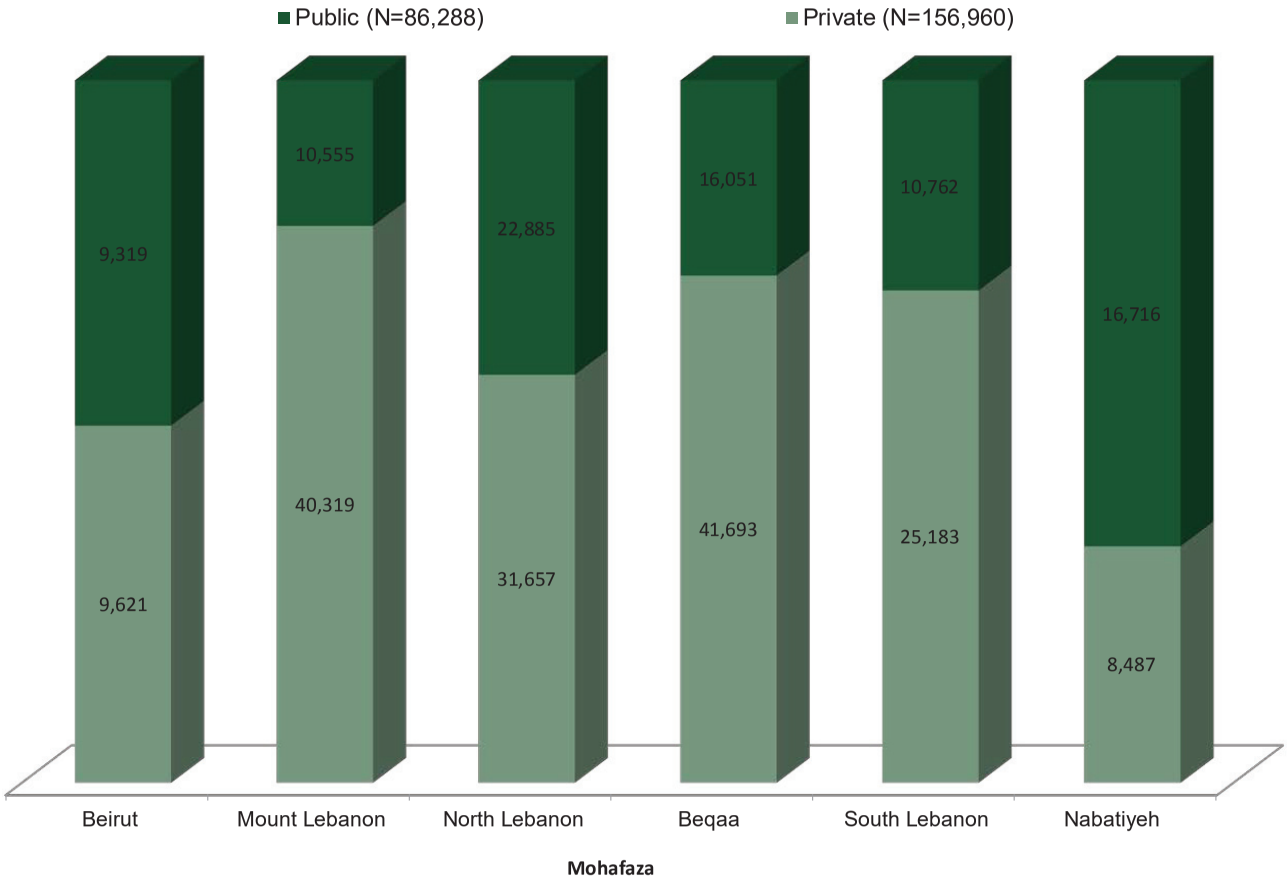
Source: Ministry of interior and municipalities in addition to Governorate of Beirut, MOPH.
An analysis of 4,178 certificate of death in Beirut Governorate.

Graph C.1: Hospitals contracting with MOPH by Mohafaza and type, 2016



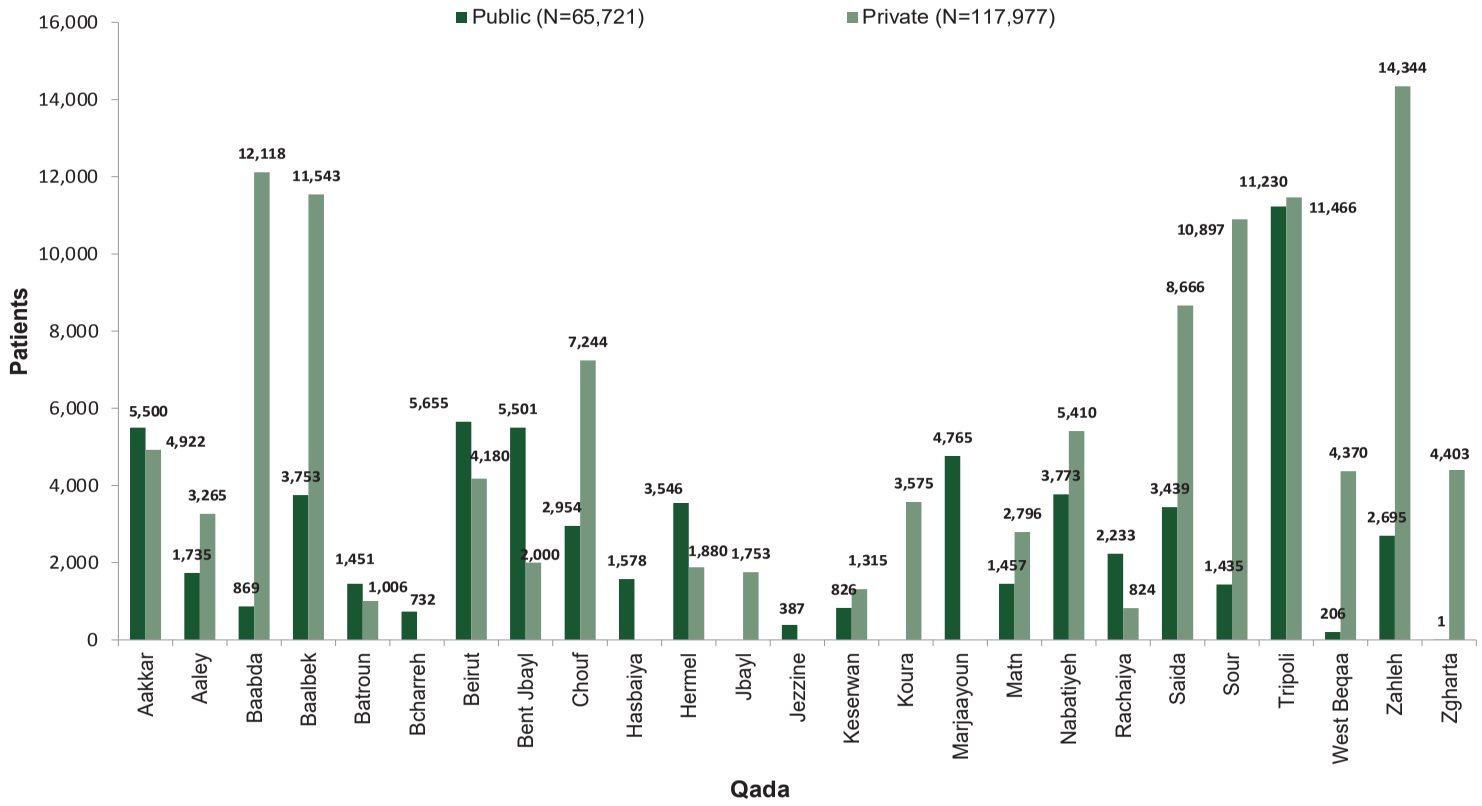
Source: Hospital billing database, IT department, MOPH.

Graph C.2 : MOPH subsidized admissions by Mohafaza and type of hospital, 2016



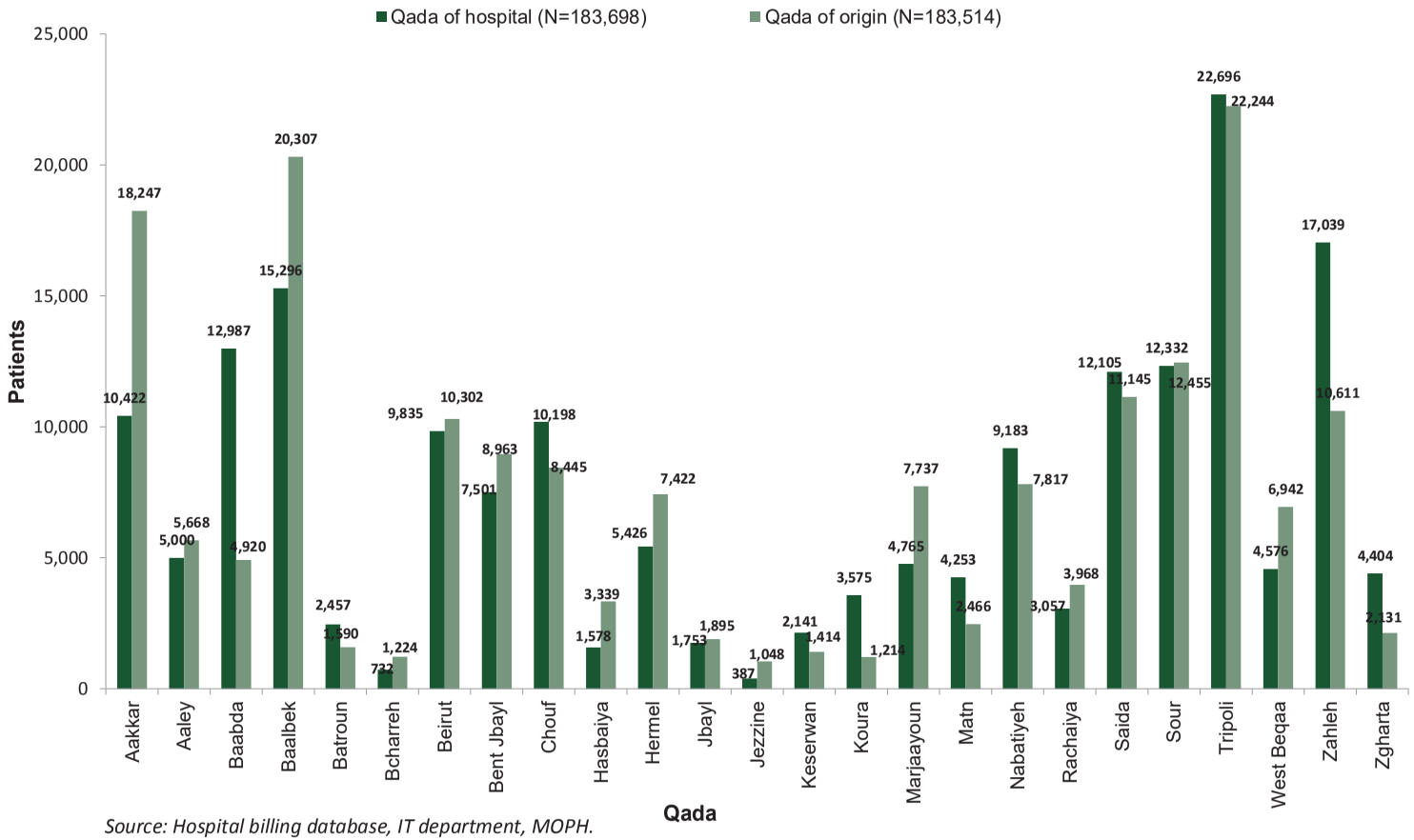
Source: Hospital billing database, IT department, MOPH.

Graph C.3: MOPH subsidized in-patients by Qada and type of hospital, 2016



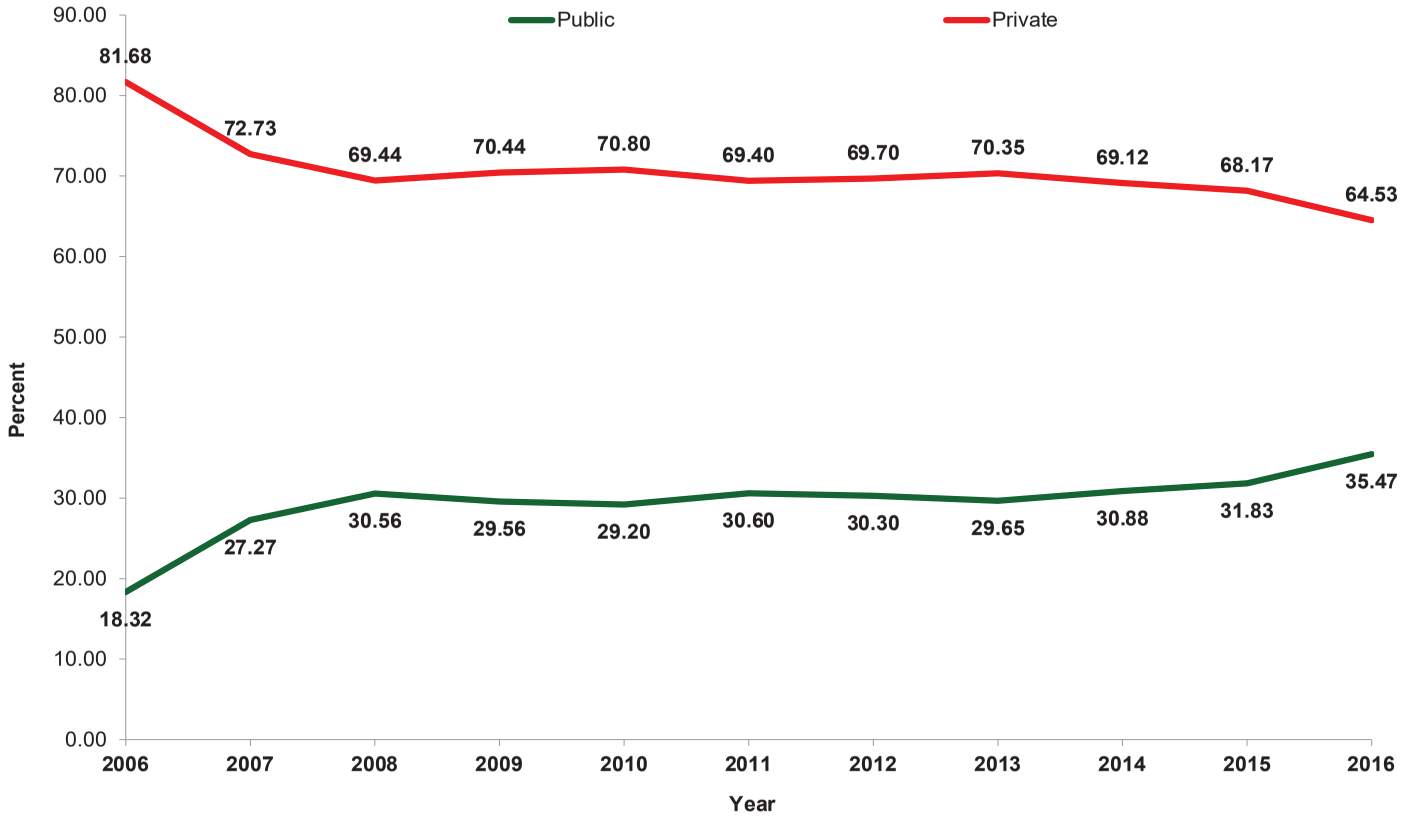
Source: Hospital billing database, IT department, MOPH.

Graph C.4: MOPH subsidized in-patients by Qada of hospital and Qada of origin, 2016



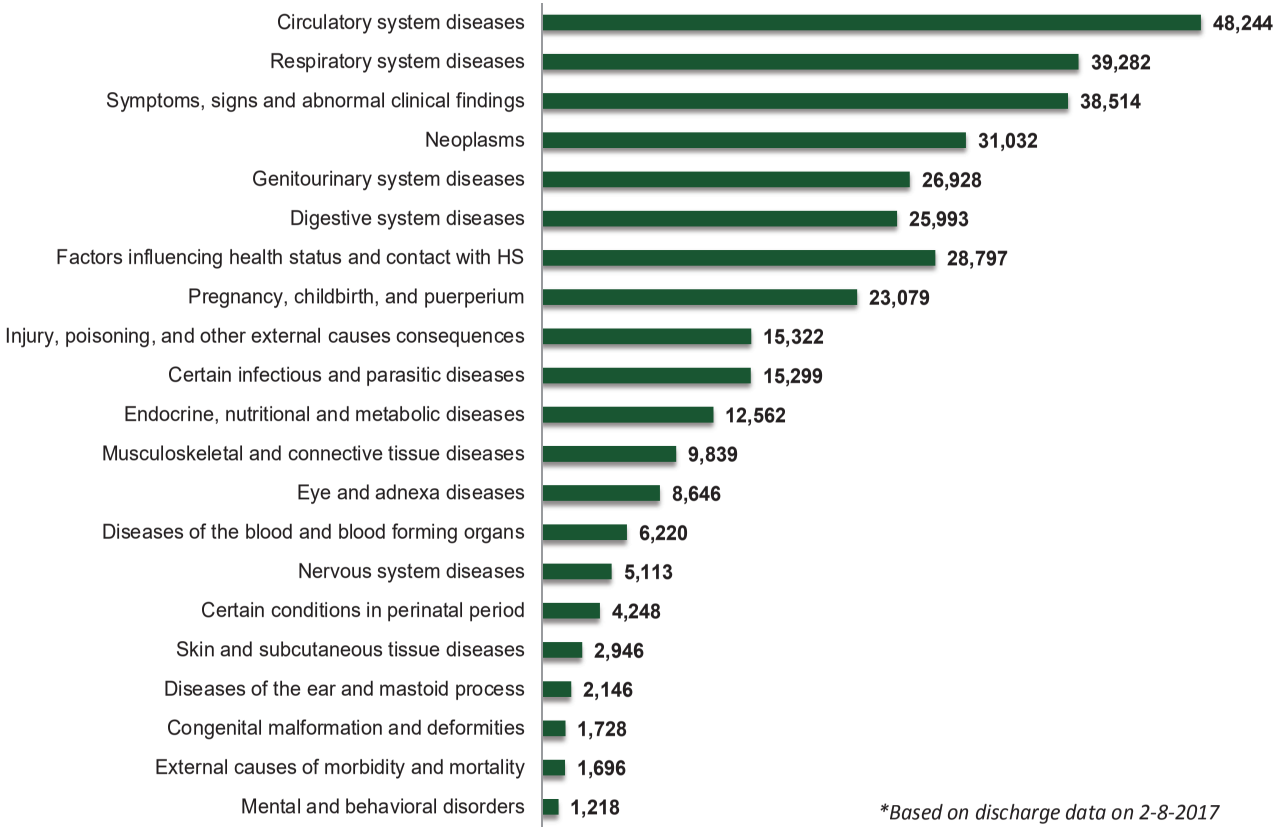
Source: Hospital billing database, IT department, MOPH.

Graph C.5: The evolution of MOPH subsidized admissions in public and private hospitals between 2006 and 2016



Source: Hospital billing database, IT department, MOPH.

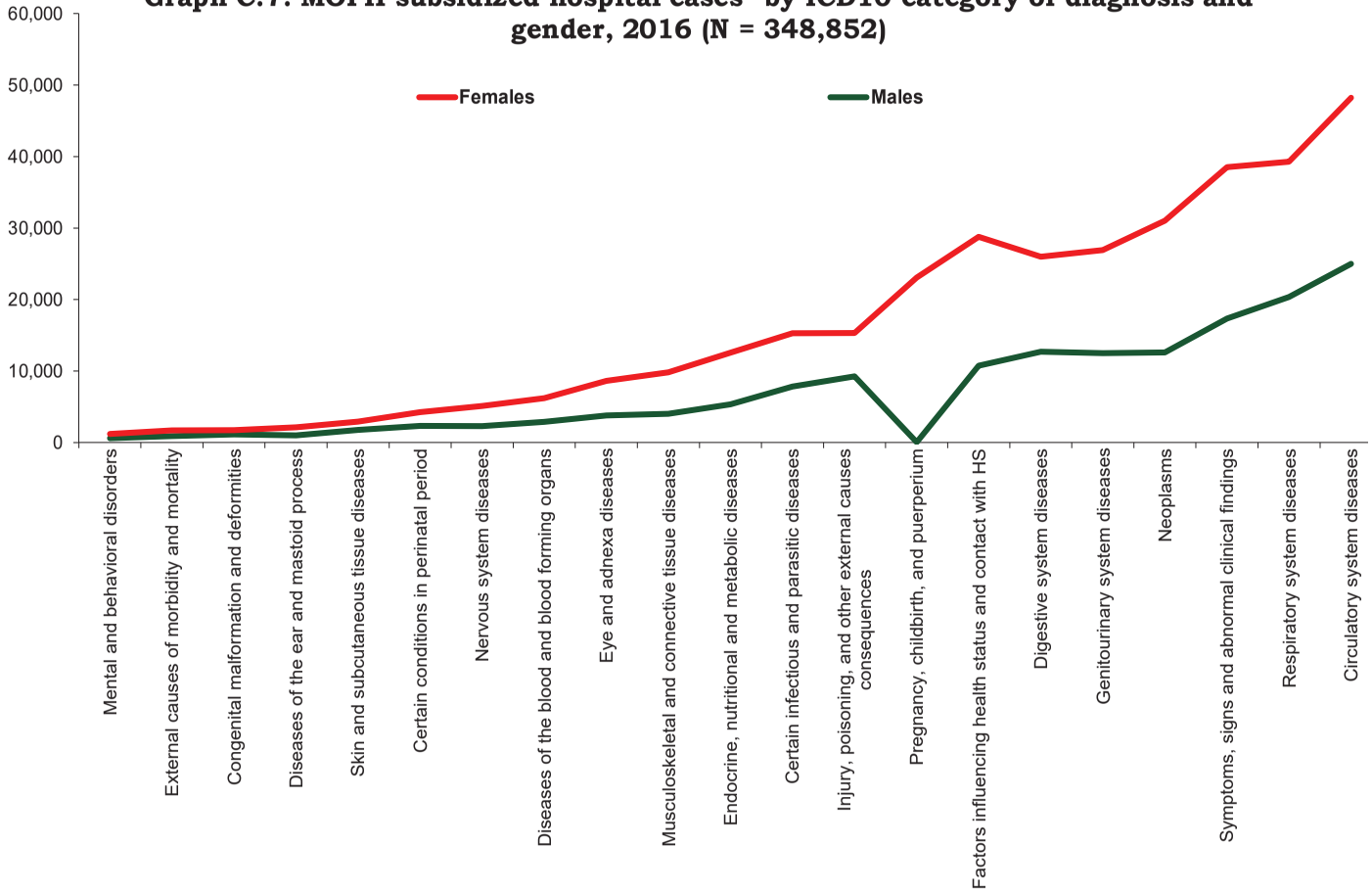
Graph C.6: MOPH subsidized hospital cases* by ICD10 category of diagnosis, 2016 (N=348,852)



**Based on discharge data on 2-8-2017*

Source: Hospital billing database, IT department, MOPH.

Graph C.7: MOPH subsidized hospital cases* by ICD10 category of diagnosis and gender, 2016 (N = 348,852)



**Based on discharge data on 2-8-2017*

Source: Hospital billing database, IT department, MOPH.

Table C.1: MOPH subsidized hospital cases by category of diagnosis and gender, 2016*

ICD10	Codes	Description	M	F	T
Chapter 1	**A00-B99**	**Certain infectious and parasitic diseases**	**M**	**F**	**T**
	A00-A09	Intestinal Infectious Diseases	6,044	5,644	**11,688**
	A15-A19	Tuberculosis	25	26	**51**
	A20-A28	Certain zoonotic bacterial diseases	53	63	**116**
	A30-A49	Other bacterial diseases	650	680	**1,330**
	A50-A64	Infections with a predominantly sexual mode of transmission	14	16	**30**
	A65-A69	Other spirochaetal diseases	4	3	**7**
	A70-A74	Other diseases caused by chlamydiae	0	0	**0**
	A75-A79	Rickettsioses	5	1	**6**
	A80-A89	Viral Infections of the CNS	41	28	**69**
	A90-A99	Arthropod-borne viral fevers and viral hemorrhagic fevers	2	4	**6**
	B00-B09	Viral Infections characterized by skin and mucous membrane lesions	65	83	**148**
	B15-B19	Viral hepatitis	154	82	**236**
	B20-B24	Human immunodeficiency virus[HIV] disease	32	1	**33**
	B25-B34	Other viral diseases	158	104	**262**
	B35-B49	Mycoses	72	55	**127**
	B50-B64	Protozoal diseases	38	12	**50**
	B65-B83	Helminthiases	37	29	**66**
	B85-B89	Pediculosis, acariasis and other infestations	3	4	**7**
	B90-B94	Sequelae of infectious and parasitic diseases	3	6	**9**
	B95-B97	Bacterial, viral and other infectious agents	414	603	**1,017**
	B99	Other infectious diseases	20	21	**41**
Total			**7,834**	**7,465**	**15,299**
Chapter 2	**C00-D48**	**Neoplasms**	**M**	**F**	**T**
	C00-C97	Malignant Neoplasms	11,377	16,130	**27,507**
	C00-C14.8	Lip oral cavity and pharynx	244	143	**387**
	C15-C26.9	Digestive organs	1,835	1,747	**3,582**
	C30-C39.9	Respiratory and intrathoracic organs	1,997	1,023	**3,020**
	C40-C41.9	Bone and articular cartilage	164	152	**316**
	C43-C44.9	Melanoma and other malignant neoplasms of skin	122	82	**204**
	C45-C49.9	Mesothelial and soft tissue	130	116	**246**
	C50-C50.9	Breast	224	6,853	**7,077**
	C51-C58	Female genital organs	37	1,471	**1,508**
	C60-C63.9	Male genital organs	821	15	**836**
	C64-C68.9	Urinary tract	1,150	389	**1,539**
	C69-C72.9	Eye, brain and other parts of CNS	374	200	**574**
	C73-C75.9	Thyroid and other endocrine glands	172	167	**339**
	C76-C80	Ill-defined, secondary and unspecified sites	562	950	**1,512**
	C81-C96.9	Lymphoid, haematopoietic and related tissue	3,543	2,819	**6,362**
	C97	Independent (primary) multiple sites	2	3	**5**
	D00-D09	In situ neoplasms	82	103	**185**
	D10-D36	Benign neoplasms	797	1,896	**2,693**
	D37-D48	Neoplasms of uncertain and unknown behavior	340	307	**647**
Total			**12,596**	**18,436**	**31,032**

ICD10	Codes	Description	M	F	T
Chapter 3	**D50-D89**	**Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism**	**M**	**F**	**T**
	D50-D53	Nutritional anaemias	345	803	**1,148**
	D55-D59	Haemolytic anaemias	950	708	**1,658**
	D60-D64	Aplastic and other anaemias	1,031	1,428	**2,459**
	D65-D69	Coagulation defects, purpura and other haemorrhagic conditions	233	171	**404**
	D70-D77	Other diseases of the blood and blood forming organs	183	145	**328**
	D80-D89	Certain disorders involving the immune mechanism	152	71	**223**
Total			**2,894**	**3,326**	**6,220**
Chapter 4	**E00-E90**	**Endocrine, nutritional and metabolic diseases**	**M**	**F**	**T**
	E00-E07	Disorders of thyroid gland	264	1,245	**1,509**
	E10-E14	Diabetes mellitus	3,151	3,569	**6,720**
	E15-E16	Other disorders of glucose regulation and pancreatic internal secretion	51	93	**144**
	E20-E35	Disorders of other endocrine glands	122	149	**271**
	E40-E46	Malnutrition	12	14	**26**
	E50-E64	Other nutritional deficiencies	29	47	**76**
	E65-E68	Obesity and other hyperalimentation	277	608	**885**
	E70-E90	Metabolic disorders	1,452	1,479	**2,931**
Total			**5,358**	**7,204**	**12,562**
Chapter 5	**F00-F99**	**Mental and behavioral disorders**	**M**	**F**	**T**
	F00-F09	Organic, including symptomatic, mental disorders	34	39	**73**
	F10-F19	Mental and behavioral disorders due to psychoactive substance abuse	150	100	**250**
	F20-F29	Schizophrenia, schizotypal and delusional disorders	205	140	**345**
	F30-F39	Mood [affective] disorders	94	146	**240**
	F40-F48	Neurotic, stress-related and somatoform disorders	73	114	**187**
	F50-F59	Behavioral syndromes associated with physiological disturbances and physical factors	12	15	**27**
	F60-F69	Disorders of adult personality and behaviour	3	12	**15**
	F70-F79	Mental retardation	19	15	**34**
	F80-F89	Disorders of psychological development	20	12	**32**
	F90-F98	Behavioral and emotional disorders with onset usually occurring in childhood and adolescence	5	3	**8**
	F99	Unspecified mental disorder	3	4	**7**
Total			**618**	**600**	**1,218**
Chapter 6	**G00-G99**	**Diseases of the nervous system**	**M**	**F**	**T**
	G00-G09	Inflammatory diseases of the central nervous system	78	62	**140**
	G10-G13	Systemic atrophies primarily affecting the nervous system	22	21	**43**
	G20-G26	Extrapyramidal and mood disorders	54	57	**111**
	G30-G32	Other degenerative diseases of the nervous system	53	66	**119**
	G35-G37	Demyelinating diseases of the CNS	103	193	**296**
	G40-G47	Episodic and paroxysmal disorders	1,030	1,073	**2,103**
	G50-G59	Nerve, nerve root and plexus disorders	233	690	**923**
	G60-G64	Polyneuropathies and other disorders of the peripheral NS	53	69	**122**
	G70-G73	Diseases of myoneural junction and muscle	55	28	**83**
	G80-G83	Cerebral palsy and other paralytic syndromes	410	367	**777**
	G90-G99	Others disorders of the nervous system	204	192	**396**
Total			**2,295**	**2,818**	**5,113**

ICD10	Codes	Description	M	F	T
Chapter 7	**H00-H59**	**Diseases of the eye and adnexa**	**M**	**F**	**T**
	H00-H06	Disorders of eyelid, lachrymal system and orbit	141	196	**337**
	H10-H13	Disorders of conjunctiva	62	56	**118**
	H15-H22	Disorders of sclera, cornea, iris, and ciliary body	86	85	**171**
	H25-H28	Disorders of lens	2,754	3,890	**6,644**
	H30-H36	Disorders of choroid and retina	180	118	**298**
	H40-H42	Glaucoma	107	125	**232**
	H43-H45	Disorders of vitreous body and globe	172	128	**300**
	H46-H48	Disorders of optic nerve and visual pathways	6	8	**14**
	H49-H52	Disorders of ocular muscles, binocular movement accommodation and refraction	59	85	**144**
	H53-H54	Visual disturbances and blindness	137	106	**243**
	H55-H59	Other disorders of eye and adnexa	83	62	**145**
Total			**3,787**	**4,859**	**8,646**
Chapter 8	**H60-H95**	**Diseases of the ear and mastoid process**	**M**	**F**	**T**
	H60-H62	Diseases of the external ear	182	165	**347**
	H65-H75	Diseases of the middle ear and mastoid	580	566	**1,146**
	H80-H83	Diseases of the inner ear	234	358	**592**
	H90-H95	Other disorders of ear	22	39	**61**
Total			**1,018**	**1,128**	**2,146**
Chapter 9	**I00-I99**	**Diseases of the circulatory system**	**M**	**F**	**T**
	I00-I02	Acute rheumatic fever	22	24	**46**
	I05-I09	Chronic rheumatic heart disease	114	175	**289**
	I10-I15	Hypertensive diseases	5,399	7,113	**12,512**
	I20-I25	Ischemic heart diseases	11,021	7,771	**18,792**
	I26-I28	Pulmonary heart disease and diseases of the pulmonary circulation	60	113	**173**
	I30-I52	Other forms of heart disease	4,183	4,954	**9,137**
	I60-I69	Cerebrovascular diseases	1,390	1,376	**2,766**
	I70-I79	Diseases of arteries, arterioles and capillaries	829	560	**1,389**
	I80-I89	Diseases of veins, lymphatic vessels and lymph nodes NEC	1,770	878	**2,648**
	I95-I99	Other and unspecified disorders of the circulatory system	201	291	**492**
Total			**24,989**	**23,255**	**48,244**
Chapter 10	**J00-J99**	**Diseases of the respiratory system**	**M**	**F**	**T**
	J00-J06	Acute upper respiratory infections	1,765	1,332	**3,097**
	J10-J18	Influenza and pneumonia	6,847	6,380	**13,227**
	J20-J22	Other acute lower respiratory infections	2,974	2,500	**5,474**
	J30-J39	Other diseases of upper respiratory tract	3,899	3,515	**7,414**
	J40-J47	Chronic lower respiratory diseases	3,130	3,213	**6,343**
	J60-J70	Lung diseases due to external agents	55	45	**100**
	J80-J84	Other resp. diseases principally affecting interstitium	769	966	**1,735**
	J85-J86	Suppurative and necrotic conditions of lower RT	38	9	**47**
	J90-J94	Other diseases of plura	472	445	**917**
	J95-J99	Other diseases of the respiratory system	430	498	**928**
Total			**20,379**	**18,903**	**39,282**

ICD10	Codes	Description	M	F	T
Chapter 11	**K00-K93**	**Diseases of the digestive system**	**M**	**F**	**T**
	K00-K14	Diseases of oral cavity, salivary glands and jaws	135	135	**270**
	K20-K31	Diseases of oesophagus, stomach and duodenum	1,854	2,791	**4,645**
	K35-K38	Diseases of appendix	852	757	**1,609**
	K40-K46	Hernia	3,706	1,428	**5,134**
	K50-K52	Noninfective enteritis and colitis	1,517	1,824	**3,341**
	K55-K63	Other diseases of intestines	1,938	1,665	**3,603**
	K65-K67	Diseases of peritoneum	171	206	**377**
	K70-K77	Diseases of liver	445	296	**741**
	K80-K87	Disorders of gallbladder, biliary tract and pancreas	1,761	3,795	**5,556**
	K90-K93	Other diseases of the digestive system	335	382	**717**
Total			**12,714**	**13,279**	**25,993**
Chapter 12	**L00-L99**	**Diseases of the skin and subcutaneous tissue**	**M**	**F**	**T**
	L00-L08	Infections of the skin and subcutaneous tissue	1,109	624	**1,733**
	L10-L14	Bullous disorders	5	5	**10**
	L20-L30	Dermatitis and eczema	23	22	**45**
	L40-L45	Papulosquamous disorders	22	11	**33**
	L50-L54	Urticaria and erythema	41	50	**91**
	L55-L59	Radiation-related disorders of the skin and subcutaneous tissue	3	3	**6**
	L60-L75	Disorders of skin appendages	55	45	**100**
	L80-L99	Other disorders of the skin and subcutaneous tissue	519	409	**928**
Total			**1,777**	**1,169**	**2,946**
Chapter 13	**M00-M99**	**Diseases of the musculoskeletal system and connective tissue**	**M**	**F**	**T**
	M00-M25	Arthropathies	**1,532**	**2,302**	**3,834**
	M0-M03	*Infectious arthropathies*	*30*	*20*	**50**
	M05-M14.8	*Inflammatory polyarthropathies*	*364*	*798*	**1,162**
	M15-M19.9	*Arthrosis*	*418*	*785*	**1,203**
	M20-M25.9	*Other joint disorders*	*720*	*699*	**1,419**
	M30-M36	Systemic connective tissue disorders	52	98	**150**
	M40-M54	Dorsopathies	**1,265**	**2,066**	**3,331**
	M40-M43.9	*Deforming dorsopathies*	*60*	*140*	**200**
	M45-M49.8	*Spondylopathies*	*189*	*321*	**510**
	M50-M54.9	*Other dorsopathies*	*1,016*	*1,605*	**2,621**
	M60-M79	Soft tissue disorders	**632**	**881**	**1,513**
	M60-M63.8	*Disorders of muscles*	*75*	*67*	**142**
	M65-M68.8	*Disorders of synovium and tendon*	*211*	*400*	**611**
	M70-M79.9	*Other soft tissue disorders*	*346*	*414*	**760**
	M80-M94	Osteopathies and chondropathies	**501**	**434**	**935**
	M80-M85.9	*Disorders of bonedensity and structure*	*204*	*241*	**445**
	M86-M90.8	*Other osteopathies*	*277*	*172*	**449**
	M91-M94.9	*Chondropathies*	*20*	*21*	**41**
	M95-M99	Other disorders of the musculoskeletal system and connective tissue	39	37	**76**
Total			**4,021**	**5,818**	**9,839**

ICD10	Codes	Description	M	F	T
Chapter 14	**N00-N99**	**Diseases of the genitourinary system**	**M**	**F**	**T**
	N00-N08	Glomerular diseases	240	197	**437**
	N10-N16	Renal tubulo-interstitial diseases	787	1,164	**1,951**
	N17-N19	Renal failure	2,061	1,851	**3,912**
	N20-N23	Urolithiasis	4,938	3,356	**8,294**
	N25-N29	Other disorders of kidney and ureter	128	89	**217**
	N30-N39	Other diseases of the urinary system	2,032	3,343	**5,375**
	N40-N51	Diseases of male genital organs	2,287	0	**2,287**
	N60-N64	Disorders of breast	33	368	**401**
	N70-N77	Inflammatory diseases of female pelvic organs	0	362	**362**
	N80-N98	Noninflammatory disorders of female genital tract	0	3,662	**3,662**
	N99	Other disorders of the genitourinary system	10	20	**30**
Total			**12,516**	**14,412**	**26,928**
Chapter 15	**O00-O99**	**Pregnancy, childbirth and puerperium**	**M**	**F**	**T**
	O00-O08	Pregnancy with abortive outcome	0	1,865	**1,865**
	O10-O16	Oedema, proteinuria and hypertensive disorders in pregnancy, childbirth and the puerperium	0	89	**89**
	O20-O29	Other maternal disorders predominantly related to pregnancy	0	273	**273**
	O30-O48	Maternal care related to the fetus and amniotic cavity and possible delivery problems	0	1,760	**1,760**
	O60-O75	Complications of labor and delivery	0	583	**583**
	O80-O84	Delivery	0	18,374	**18,374**
	O85-O92	Complications predominantly related to the puerperium	0	55	**55**
	O95-O99	Other obstetric conditions NEC	0	80	**80**
Total			**0**	**23,079**	**23,079**
Chapter 16	**P00-P96**	**Certain conditions originating in the perinatal period**	**M**	**F**	**T**
	P00-P04	Fetus and newborn affected by maternal factors and by complications of pregnancy labour and delivery	54	157	**211**
	P05-P08	Disorders related to length of gestation and fetal growth	273	242	**515**
	P10-P15	Birth trauma	14	10	**24**
	P20-P29	Respiratory and cardiovascular disorders specific to the perinatal period	1,169	815	**1,984**
	P35-P39	Infections specific to the perinatal period	287	235	**522**
	P50-P61	Haemorrhagic and haematological disorders of fetus and newborn	406	343	**749**
	P70-P74	Transitory endocrine and metabolic disorders specific to fetus and newborn	54	60	**114**
	P75-P78	Digestive system disorders of fetus and newborn	21	23	**44**
	P80-P83	Conditions involving the integument and temperature regulation of fetus and newborn	14	8	**22**
	P90-P96	Other disorders originating in the perinatal period	31	32	**63**
Total			**2,323**	**1,925**	**4,248**

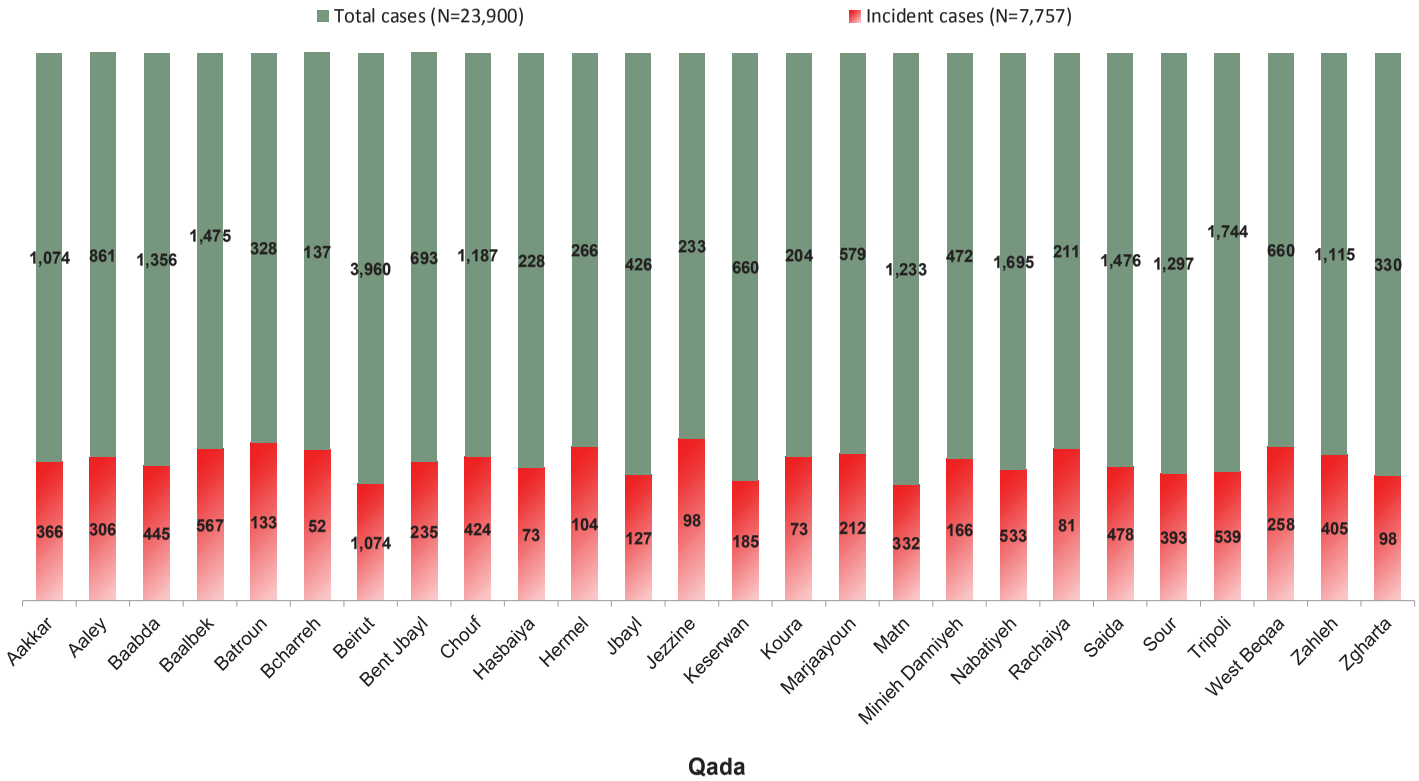
ICD10	Codes	Description	M	F	T
Chapter 17	**Q00-Q99**	**Congenital malformations, deformations and chromosomal abnormalities**	**M**	**F**	**T**
	Q00-Q07	Congenital malformations of the nervous system	38	32	**70**
	Q10-Q18	Congenital malformations of eye, ear, face and neck	13	10	**23**
	Q20-Q28	Congenital malformations of the circulatory system	191	199	**390**
	Q30-Q34	Congenital malformations of the respiratory system	10	10	**20**
	Q35-Q37	Cleft lip and cleft palate	30	29	**59**
	Q38-Q45	Other congenital malformations of the digestive system	87	55	**142**
	Q50-Q56	Congenital malformations of the genital organs	514	43	**557**
	Q60-Q64	Congenital malformations of the urinary system	111	63	**174**
	Q65-Q79	Congenital malformations and deformations of the musculoskeletal system	97	101	**198**
	Q80-Q89	Other congenital malformations	23	37	**60**
	Q90-Q99	Chromosomal abnormalities, NEC	19	16	**35**
Total			**1,133**	**595**	**1,728**
Chapter 18	**R00-R99**	**Symptoms, signs and abnormal clinical and laboratory findings NEC**	**M**	**F**	**T**
	R00-R09	Symptoms and signs involving the circulatory and respiratory systems	4,902	5,596	**10,498**
	R10-R19	Symptoms and signs involving the digestive system and abdomen	5,747	8,998	**14,745**
	R20-R23	Symptoms and signs involving the skin and subcutaneous tissue	178	171	**349**
	R25-R29	Symptoms and signs involving the nervous and musculoskeletal systems	39	29	**68**
	R30-R39	Symptoms and signs involving the urinary system	920	503	**1,423**
	R40-R46	Symptoms and signs involving cognition, perception, emotional state and behaviour	532	766	**1,298**
	R47-R49	Symptoms and signs involving speech and voice	27	27	**54**
	R50-R69	General symptoms and signs	4,756	4,823	**9,579**
	R70-R79	Abnormal findings on examination of blood, without diagnosis	129	145	**274**
	R80-R82	Abnormal findings on examination of urine, without diagnosis	7	12	**19**
	R83-R89	Abnormal findings on examination of other body fluids substances and tissues, without diagnosis	5	6	**11**
	R90-R94	Abnormal findings on diagnostic imaging and in function studies, without diagnosis	76	46	**122**
	R95-R99	Ill-defined and unknown causes of mortality	39	35	**74**
Total			**17,357**	**21,157**	**38,514**

ICD10	Codes	Description	M	F	T
Chapter 19	**S00-T98**	**Injury, poisoning and certain other consequences of external causes**	**M**	**F**	**T**
	S00-S09	Injuries to the head	1,216	591	**1,807**
	S10-S19	Injuries to the neck	51	36	**87**
	S20-S29	Injuries to the thorax	196	108	**304**
	S30-S39	Injuries to the abdomen, lower back, lumbar spine and pelvis	281	192	**473**
	S40-S49	Injuries to the shoulder and upper arm	710	567	**1,277**
	S50-S59	Injuries to the elbow and forear	959	520	**1,479**
	S60-S69	Injuries to the wrist and hand	1,140	502	**1,642**
	S70-S79	Injuries to the hip and thigh	927	1,177	**2,104**
	S80-S89	Injuries to the knee and lower leg	1,187	613	**1,800**
	S90-S99	Injuries to the ankle and foot	405	202	**607**
	T00-T07	Injuries involving multiple body regions	1,109	636	**1,745**
	T08-T14	Injuries to unspecified part of trunk, limb or body region	226	131	**357**
	T15-T19	Effects of foreign body entering through natural orifice	64	50	**114**
	T20-T32	Burns and corrosions	106	91	**197**
	T33-T35	Frosbite	6	2	**8**
	T36-T50	Poisoning by drugs, medicaments and biological substances	48	87	**135**
	T51-T65	Toxic effects of substances chiefly nonmedicinal as to source	101	95	**196**
	T66-T78	Other and unspecified effects of external causes	61	66	**127**
	T79	Certain early complications of trauma	51	25	**76**
	T80-T88	Complications of surgical and medical care NEC	341	341	**682**
	T90-T98	Sequelae of injuries, of poisoning and of other consequences of external causes	69	36	**105**
Total			**9,254**	**6,068**	**15,322**
Chapter 20	**V01-Y98**	**External causes of morbidity and mortality**	**M**	**F**	**T**
Total			**927**	**769**	**1,696**
Chapter 21	**Z00-Z99**	**Factors influencing health status and contact with health services**	**M**	**F**	**T**
	Z00-Z13	Persons encountering health services for examination and investigation	829	934	**1,763**
	Z20-Z29	Persons with potential health hazards related to communicable diseases	44	30	**74**
	Z30-Z39	Persons encountering health services in circumstances related to reproduction	201	5,729	**5,930**
	Z40-Z54	Persons encountering health services for specific procedures and health care	7,160	8,886	**16,046**
	Z55-Z65	Persons with potential health hazards related to socioeconomic and psychosocial circumstances	4	2	**6**
	Z70-Z76	Persons encountering health services in other circumstances	629	489	**1,118**
	Z80-Z99	Persons with potential health hazards related to family and personal history and certain conditions influencing health status	1,878	1,982	**3,860**
Total			**10,745**	**18,052**	**28,797**
Total Number of Hospitalized Diagnoses			**154,592**	**194,260**	**348,852**

**Based on discharge data (On 2-8-2017)*

Source: Hospital Billing database, IT department, MOPH.

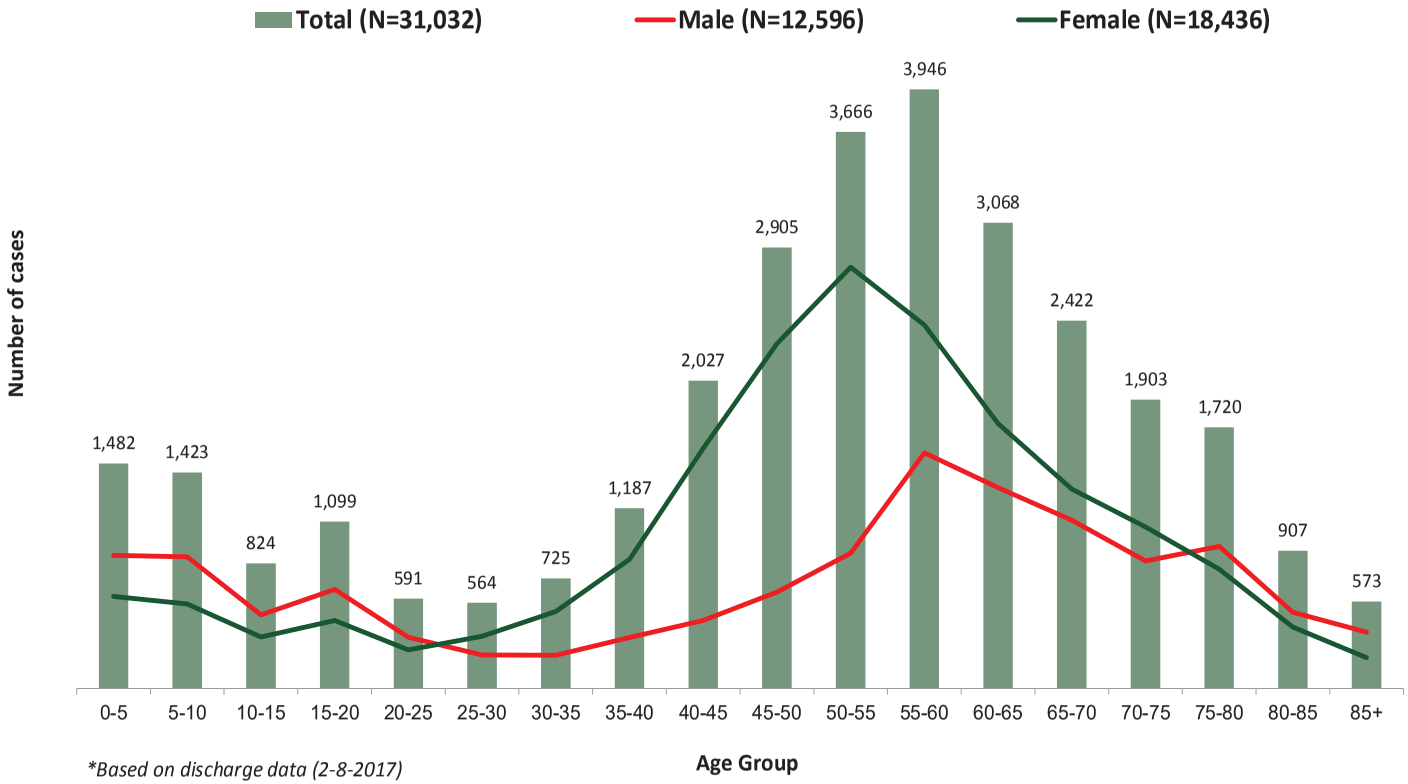
Graph C.8: Total and incident cases benefiting from the DDC* by Qada, 2016



*Drug Dispensing Center

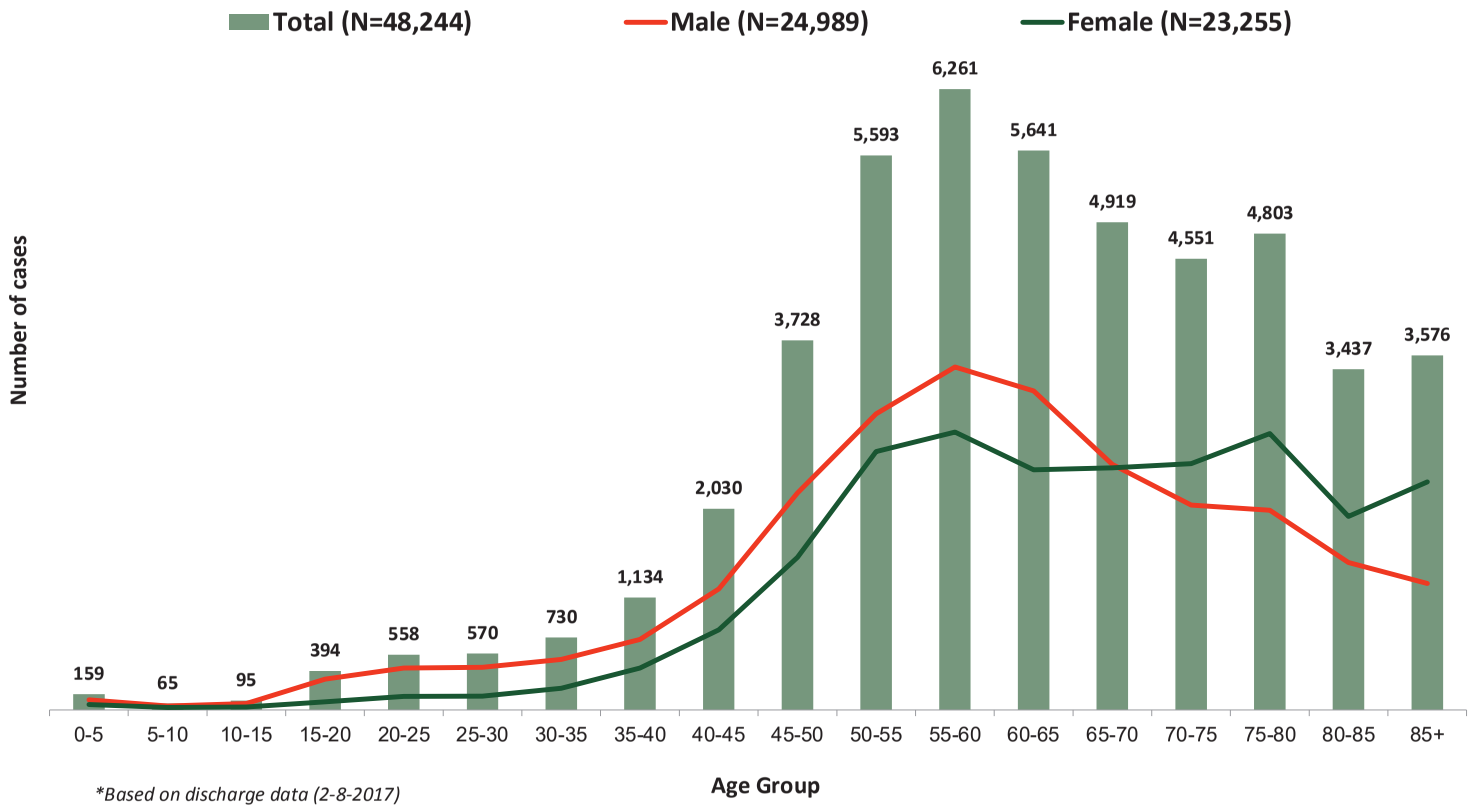
Source: Drug dispensing center database, MOPH.

Graph D.1: MOPH subsidized hospitalized *neoplasms cases by gender and age group, 2016**



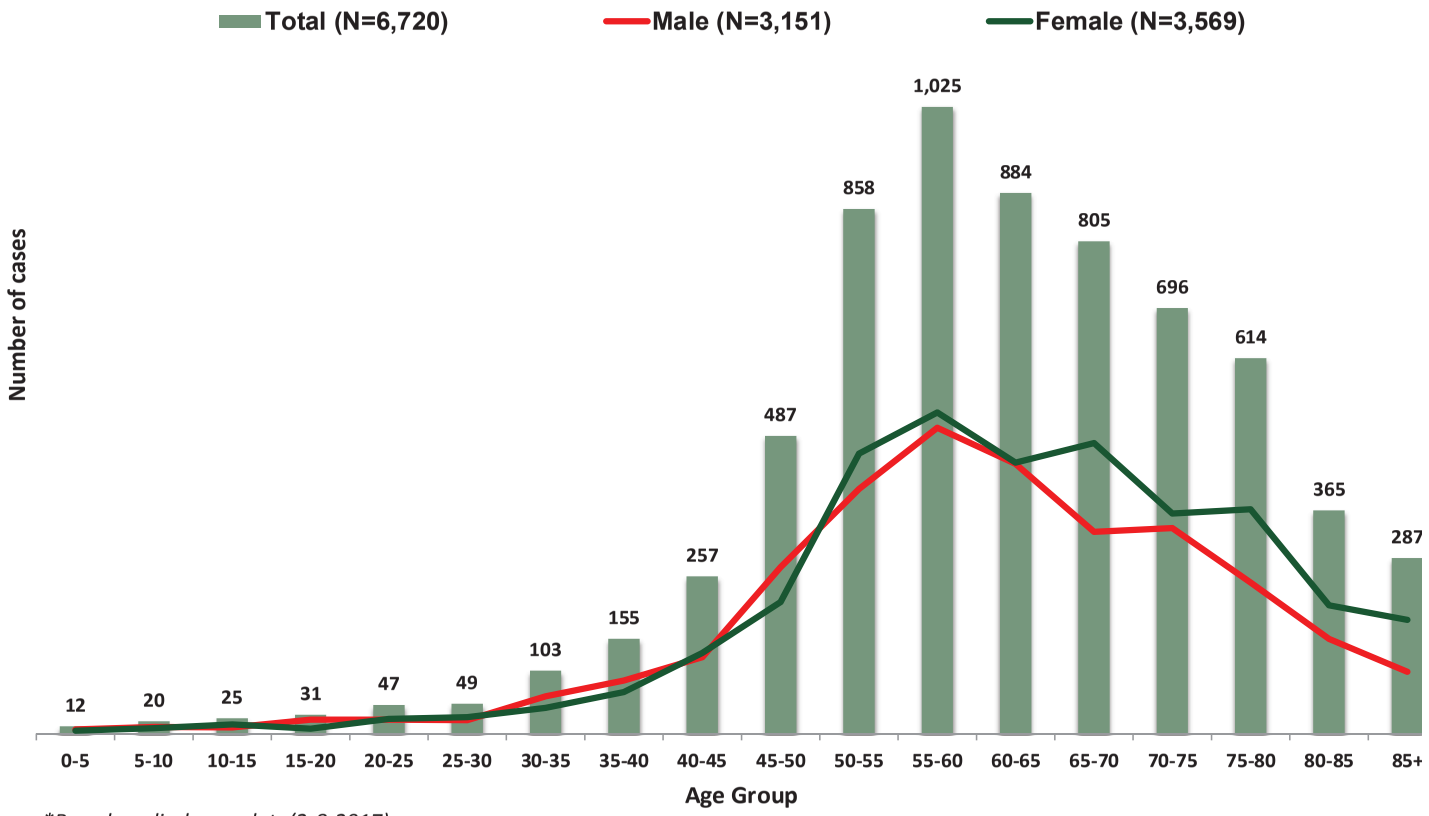
**Based on discharge data (2-8-2017)*
***ICD-codes: C00-D48*
Source: Hospital billing database, IT department, MOPH.

Graph D.2: MOPH subsidized hospitalized* cardiovascular cases by gender and age group, 2016**



**Based on discharge data (2-8-2017)*
***ICD10 codes: I00-I99*
Source: Hospital billing database, IT department, MOPH.

Graph D.3: MOPH subsidized hospitalized* diabetes mellitus cases by gender and age group, 2016**

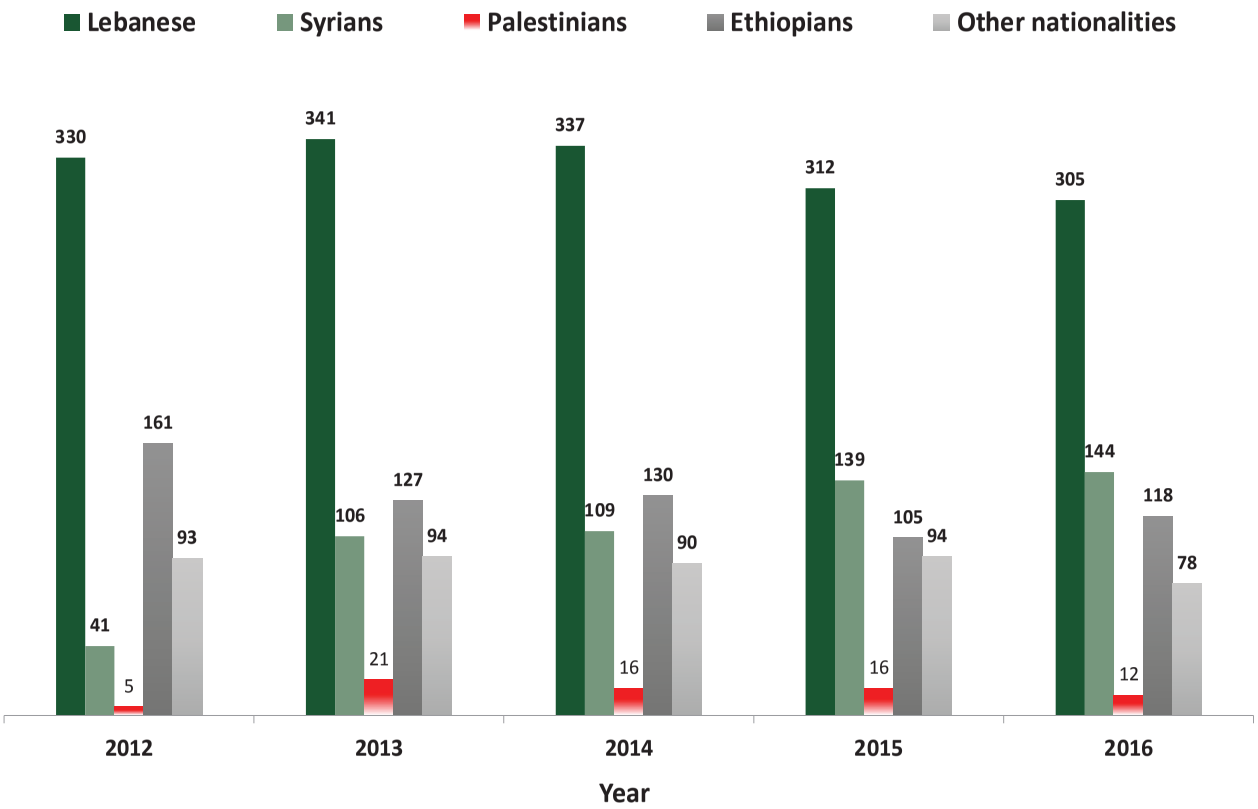


**Based on discharge data(2-8-2017)*

***ICD10 codes: E10-E14*

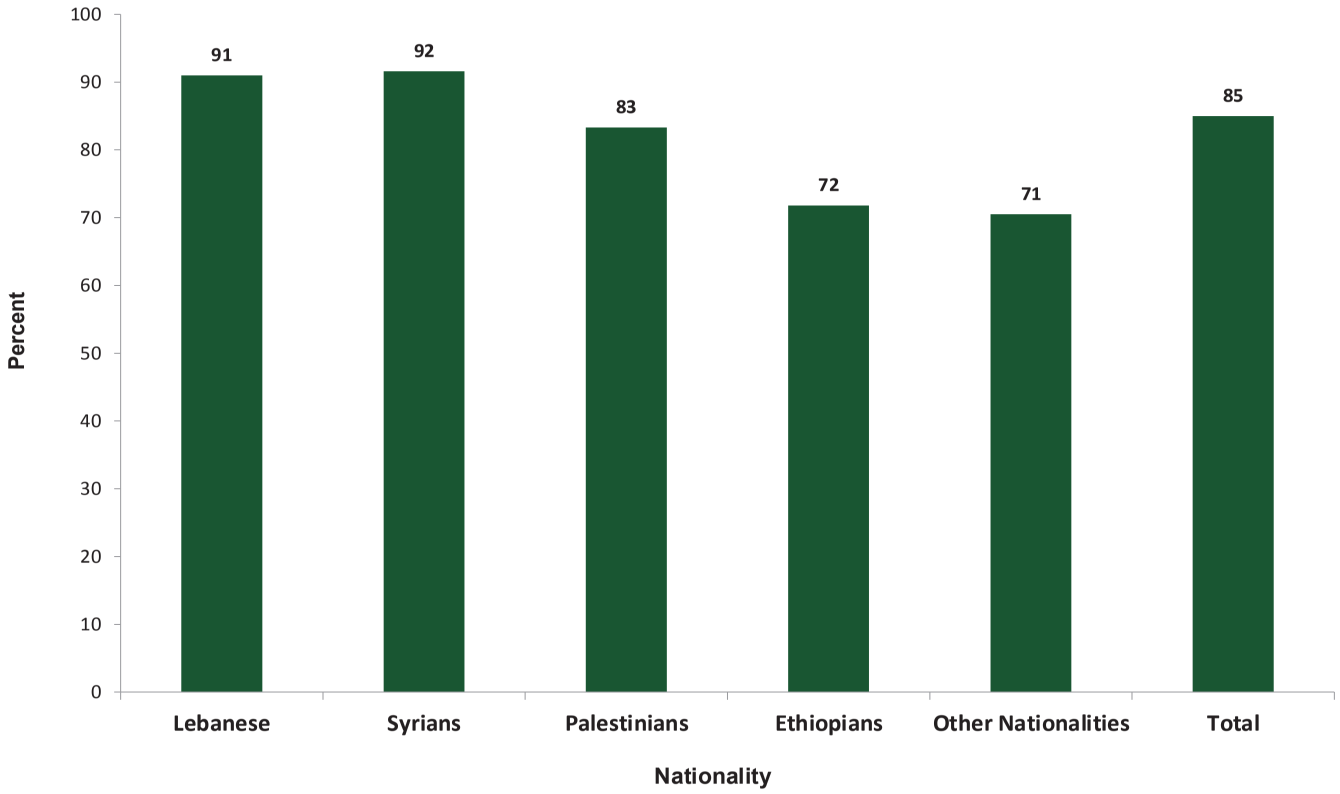
Source: Hospital billing database, IT department, MOPH.

Graph D.4: The trend in tuberculosis cases by nationality between 2012 and 2016



Source: The National Tuberculosis Program, MOPH.

Graph D.5: Proportion of tuberculosis treatment success by nationality, 2016



Source: The National Tuberculosis Program, MOPH.

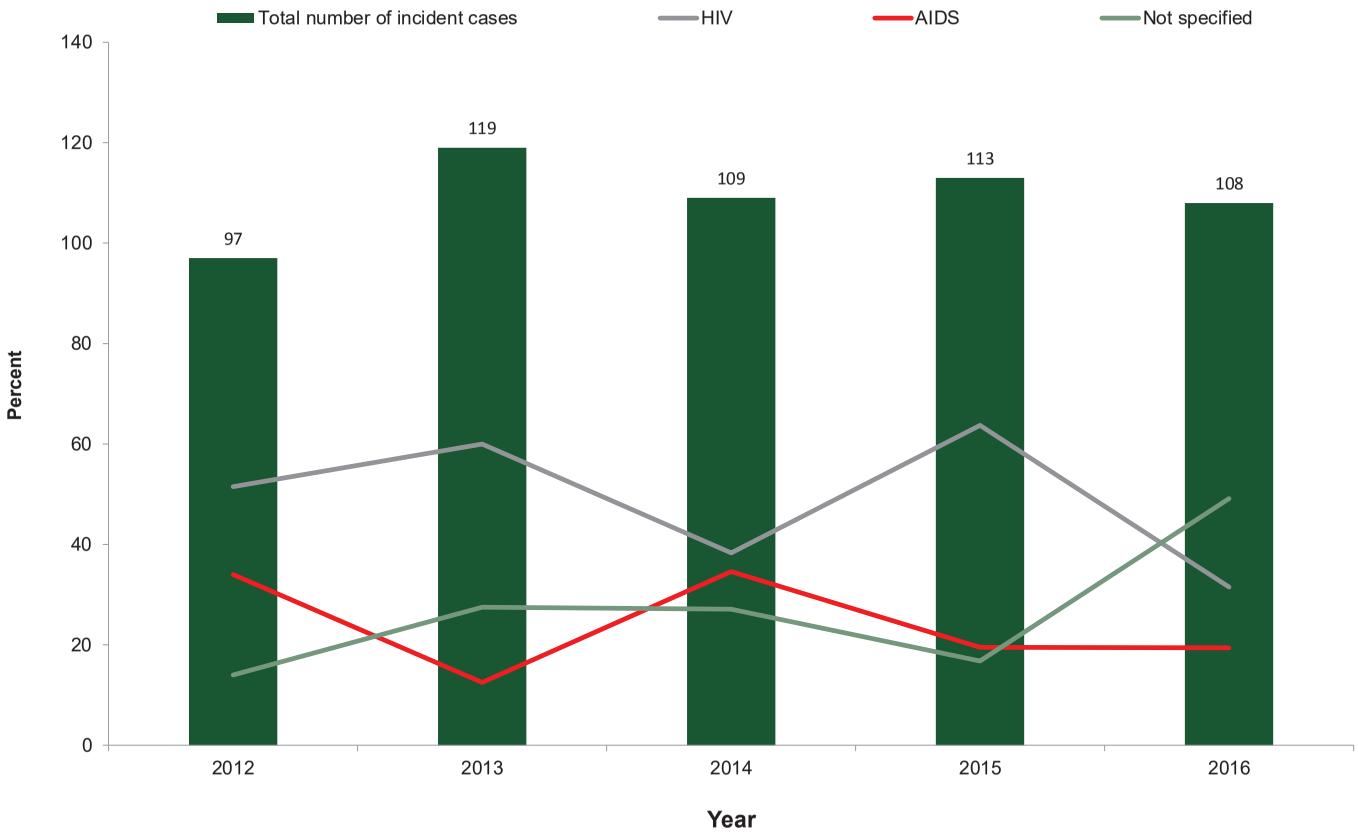
Table D.1: HIV/AIDS estimated incidence in Lebanon, 2016

Number of incident cases in 2016 is 108	
The estimated incidence rate is per 2.47 100,000*	
	N (%)
Stages of the Disease	
HIV	34(31.5%)
AIDS	21(19.4%)
Not specified	53(49.1%)
Gender	
Males	100(92.6%)
Females	8(7.4%)
Age Group	
0-14	0 (0)
15-29	46(42.6%)
30-49	28(25.9%)
>50	7(6.5%)
Unspecified	27(25%)
Mode of Transmission	
Sexual	76(70.4%)
Transfusion	0 (0)
IDU	0 (0)
Perinatal	0 (0)
Not specified	32(29.6%)
Sexual Behavior	
Homosexual	51(47.2%)
Bisexual	2(1.8%)
Heterosexual	14(13%)
Not specified	41(38%)
Travel History	
Yes	19(17.6%)
No	89(82.4%)
ART	
New in 2016	Cumulative
150	980

**Using an estimated population for 2016 of 4,355,913 as denominator.*

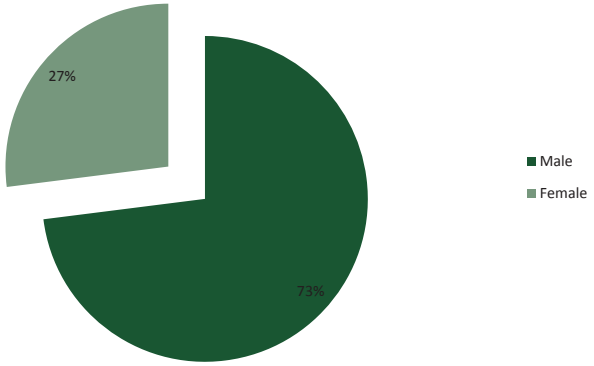
Source: National AIDS Program (NAP), MOPH

Graph D.6: The trend in incident cases of HIV/AIDS between 2012 and 2016

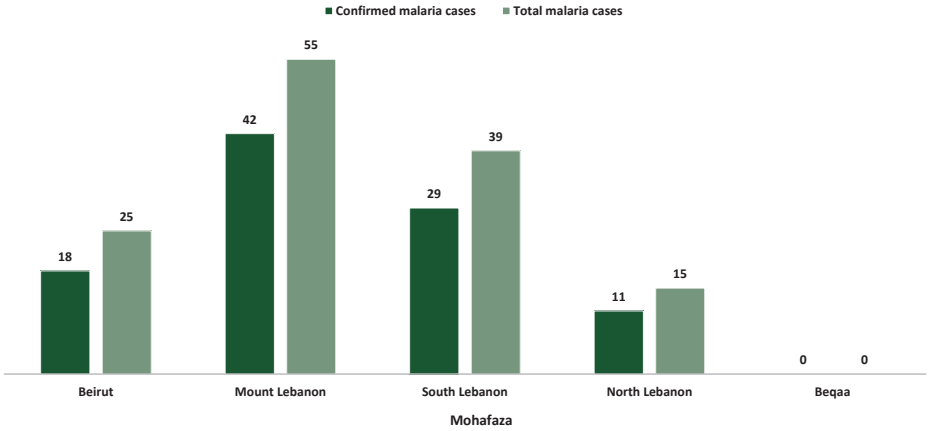


Source: National AIDS Program (NAP), MOPH.

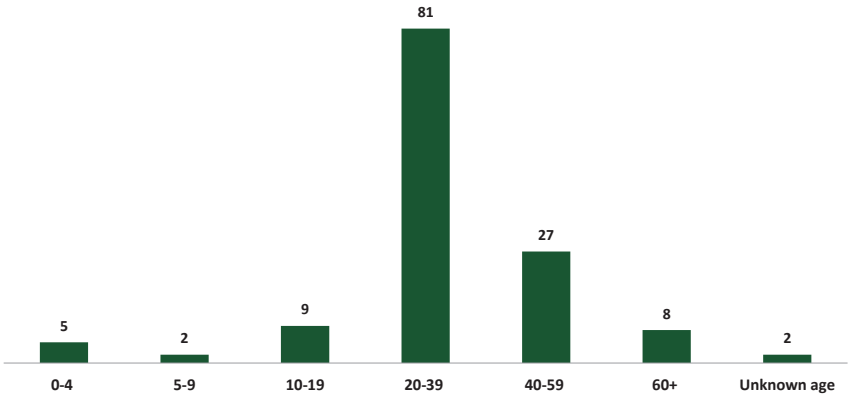
Graph D.7: Reported cases of malaria by gender, 2016



Graph D.8: Confirmed malaria cases by Mohafaza, 2016

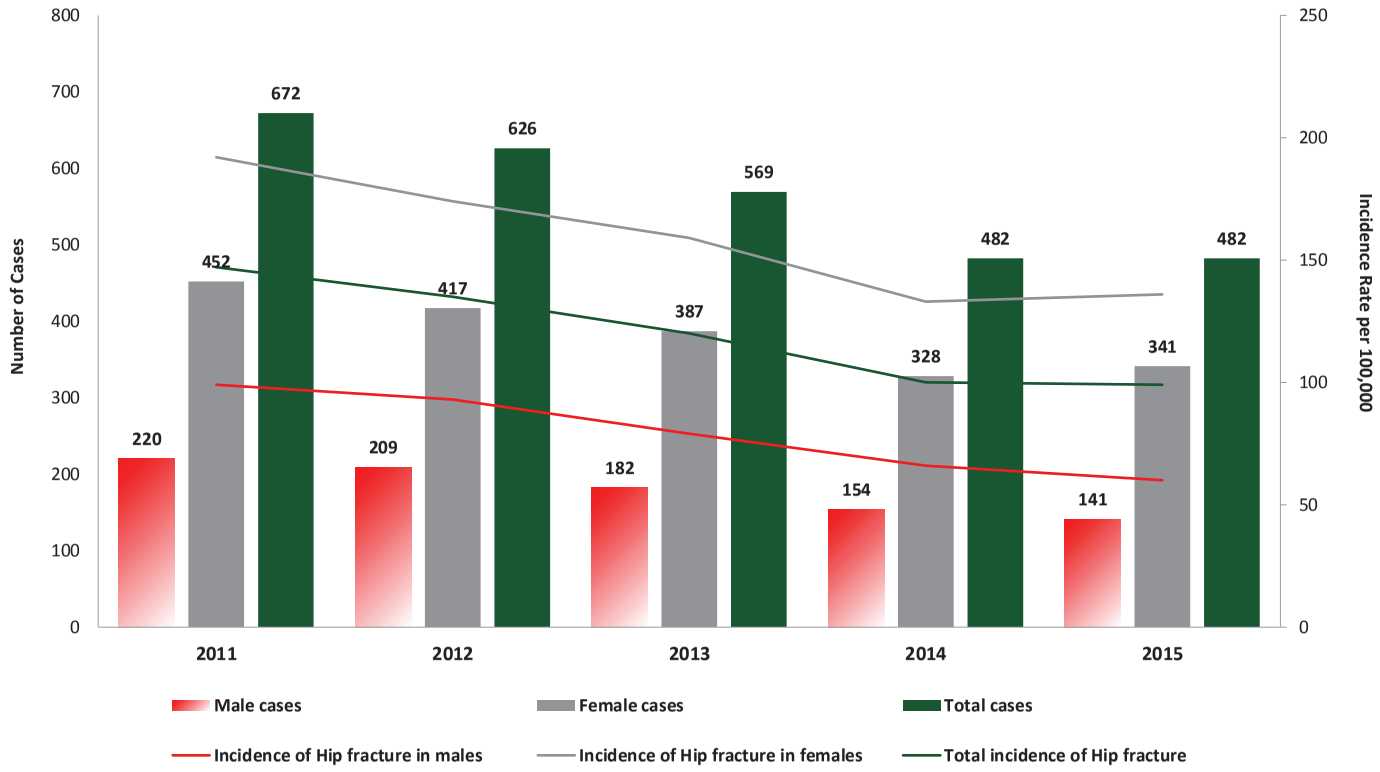


Graph D.9: Reported cases of malaria by age group, 2016



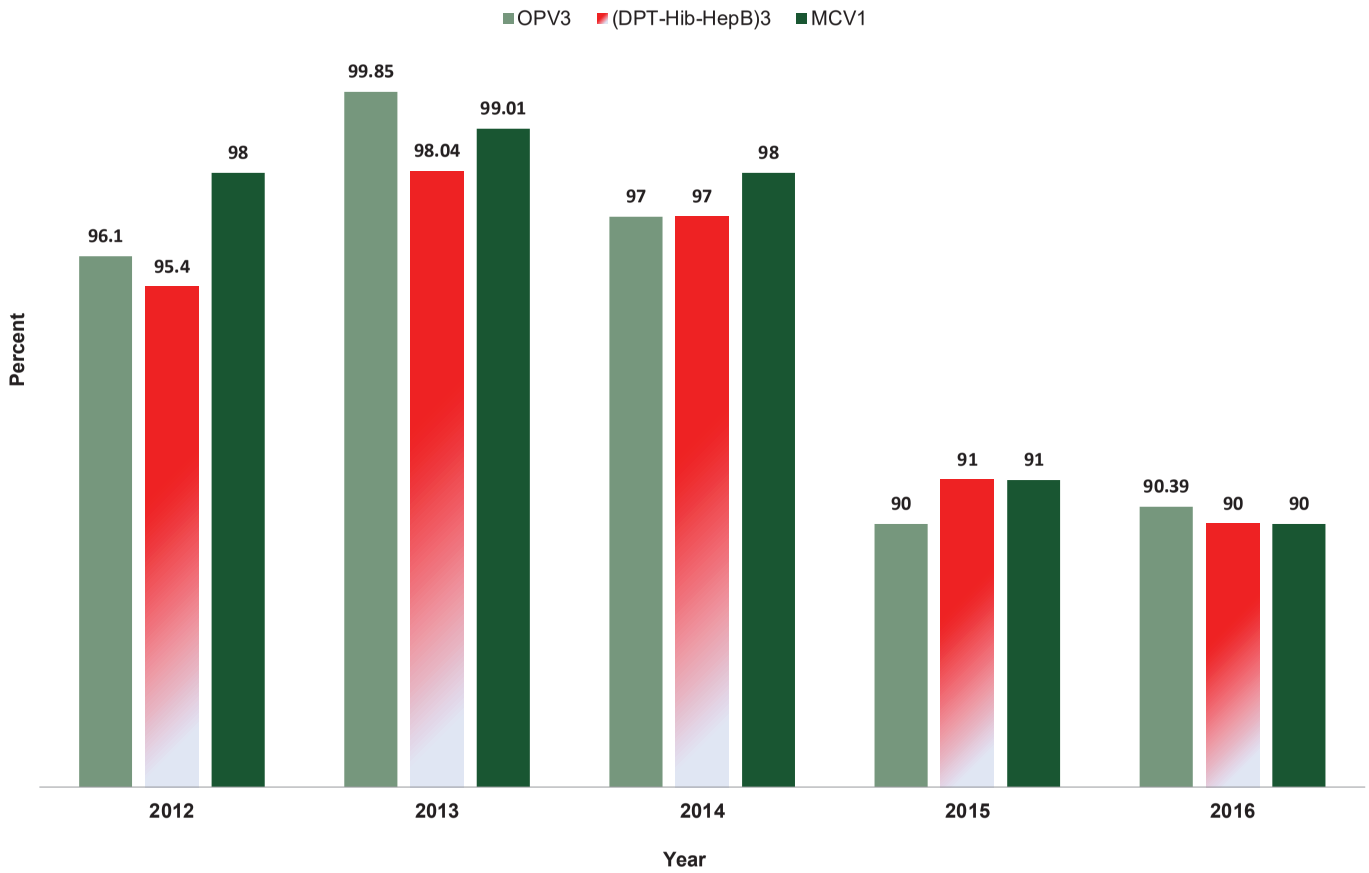
Source: Malaria Eradication Bureau, MOPH.

Graph D.10: Hip fracture cases* and incidence rate among MOPH eligible population by gender, 2011-2015



**ICD10 codes: S72.0, S72.1, S72.2*
Source:Hospital billing database, IT Ddepartment, MOPH

Graph E.1: National immunization coverage rates by polio, measles and pentavalent vaccines, 2012-2016



Source: EPI program, Department of Primary Health Care, MOPH.

Table F.1: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by month, 2016

	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Vaccine Preventable Diseases													
Acute Flaccid Paralysis	**123**	9	9	14	8	10	5	11	14	8	13	15	7
Acute Poliomyelitis	**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	**44**	2	0	6	4	9	6	3	6	3	3	1	1
Mumps	**486**	19	51	58	128	108	49	12	15	5	18	14	9
Pertussis	**97**	6	1	3	8	13	17	15	8	11	5	7	3
Rabies	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	**12**	1	2	0	1	1	0	2	0	0	1	4	0
Tetanus	**2**	0	0	0	0	0	0	0	0	0	1	0	1
Tetanus neonatal	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Viral Hepatitis B	**367**	27	47	31	36	37	22	22	34	25	23	38	25
Food & Water Borne Diseases													
Brucellosis	**402**	20	13	25	48	48	63	47	53	24	31	17	13
Cholera	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Dysentery	**330**	9	13	24	19	21	33	54	61	28	27	22	19
Food Poisoning	**524**	5	18	22	5	7	92	229	65	49	13	7	12
Hydatic Cyst	**11**	1	0	1	0	1	0	1	1	1	1	3	1
Parasitic Worms	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Trichinosis	**1**	1	0	0	0	0	0	0	0	0	0	0	0
Typhoid Fever	**598**	33	34	32	19	44	43	50	50	75	105	64	49
Viral Hepatitis A	**519**	46	26	21	18	20	24	37	35	54	78	93	67
Other Diseases													
Bilharziasis	**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
Ebola	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Gonorrhea	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Leishmaniasis	**58**	5	6	10	6	4	10	2	0	1	2	6	6
Leprosy	**3**	0	1	1	0	1	0	0	0	0	0	0	0
Meningitis	**458**	22	32	49	42	67	42	49	35	46	22	35	17
Plague	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Syphilis	**36**	2	4	1	1	4	4	3	3	5	2	6	1
Typhus	**11**	0	0	0	1	1	3	1	2	1	1	1	0
Viral Hepatitis C	**116**	0	4	17	10	8	8	6	13	11	15	11	13
Yellow Fever	**0**	0	0	0	0	0	0	0	0	0	0	0	0

Source: Epidemiological Surveillance Unit, MOPH.

Table F.2: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by age groups and gender, 2016

	Total	0-4 years	5-9 years	10-19 years	20-39 years	40-59 years	60+ years	Unknown age	Male	Female	Sex unknown
Vaccine Preventable Diseases											
Acute Flaccid Paralysis	**123**	15	15	5	2	0	0	86	68	55	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	**44**	25	10	3	5	0	0	1	27	17	0
Mumps	**486**	77	140	184	37	6	1	41	294	191	1
Pertussis	**97**	82	2	3	0	0	0	10	44	53	0
Rabies	**0**	0	0	0	0	0	0	0	0	0	0
Rubella	**12**	6	2	2	2	0	0	0	7	5	0
Tetanus	**2**	1	0	0	0	0	0	1	2	0	0
Tetanus neonatal	**0**	0	0	0	0	0	0	0	0	0	0
Viral Hepatitis B	**367**	1	1	4	199	85	28	49	236	131	0
Food & Water Borne Diseases											
Brucellosis	**402**	16	18	49	87	64	26	142	204	198	0
Cholera	**0**	0	0	0	0	0	0	0	0	0	0
Dysentery	**330**	92	39	29	42	31	45	52	157	173	0
Food Poisoning	**524**	22	43	87	95	27	10	240	297	216	11
Hydatic Cyst	**11**	0	1	1	2	2	2	3	8	3	0
Parasitic Worms	**0**	0	0	0	0	0	0	0	0	0	0
Trichinosis	**1**	0	0	0	1	0	0	0	1	0	0
Typhoid Fever	**598**	125	43	83	142	67	60	78	307	291	0
Viral Hepatitis A	**519**	70	93	200	123	9	2	22	307	212	0
Other Diseases											
Bilharziasis	**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
Ebola	**0**	0	0	0	0	0	0	0	0	0	0
Gonorrhea	**0**	0	0	0	0	0	0	0	0	0	0
Leishmaniasis	**58**	9	6	7	6	4	1	25	30	28	0
Leprosy	**3**	0	0	0	1	0	1	1	2	1	0
Meningitis	**458**	176	91	79	57	17	34	4	295	161	2
Plague	**0**	0	0	0	0	0	0	0	0	0	0
Syphilis	**36**	0	0	1	24	4	0	7	18	18	0
Typhus	**11**	0	0	1	5	3	0	2	6	5	0
Viral Hepatitis C	**116**	1	0	2	47	27	23	16	82	34	0
Yellow Fever	**0**	0	0	0	0	0	0	0	0	0	0

Source: Epidemiological Surveillance Unit, MOPH.

Table F.3: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by Mohafaza, 2016

	Total	North	Beqaa	Nabatiyeh	South	Mount-Lebanon	Beirut	Unknown
Vaccine Preventable Diseases								
Acute Flaccid Paralysis	**123**	17	21	14	14	44	10	3
Acute Poliomyelitis	**0**	0	0	0	0	0	0	0
Diphtheria	**0**	0	0	0	0	0	0	0
Measles	**44**	8	10	3	11	12	0	0
Mumps	**486**	12	162	16	227	57	7	5
Pertussis	**97**	4	35	4	5	36	7	6
Rabies	**0**	0	0	0	0	0	0	0
Rubella	**12**	1	6	1	3	1	0	0
Tetanus	**2**	0	1	0	1	0	0	0
Tetanus neonatal	**0**	0	0	0	0	0	0	0
Viral Hepatitis B	**367**	2	21	13	51	116	33	131
Food & Water Borne Diseases								
Brucellosis	**402**	25	286	16	26	22	4	23
Cholera	**0**	0	0	0	0	0	0	0
Dysentery	**330**	12	84	8	35	160	3	28
Food Poisoning	**524**	81	128	10	25	237	16	27
Hydatic Cyst	**11**	0	6	0	1	1	1	2
Parasitic Worms	**0**	0	0	0	0	0	0	0
Trichinosis	**1**	0	0	0	0	0	1	0
Typhoid Fever	**598**	56	121	49	72	218	37	45
Viral Hepatitis A	**519**	39	284	29	60	69	11	27
Other Diseases								
Bilharziasis	**0**	0	0	0	0	0	0	0
Creutzfeld Jakob Disease	**0**	0	0	0	0	0	0	0
Ebola	**0**	0	0	0	0	0	0	0
Gonorrhea	**0**	0	0	0	0	0	0	0
Leishmaniasis	**58**	0	52	0	1	2	0	3
Leprosy	**3**	0	1	0	0	0	0	2
Meningitis	**458**	58	50	27	76	193	36	18
Plague	**0**	0	0	0	0	0	0	0
Syphilis	**36**	0	2	1	9	6	2	16
Typhus	**11**	0	0	0	0	5	3	3
Viral Hepatitis C	**116**	2	2	8	25	18	8	53
Yellow Fever	**0**	0	0	0	0	0	0	0

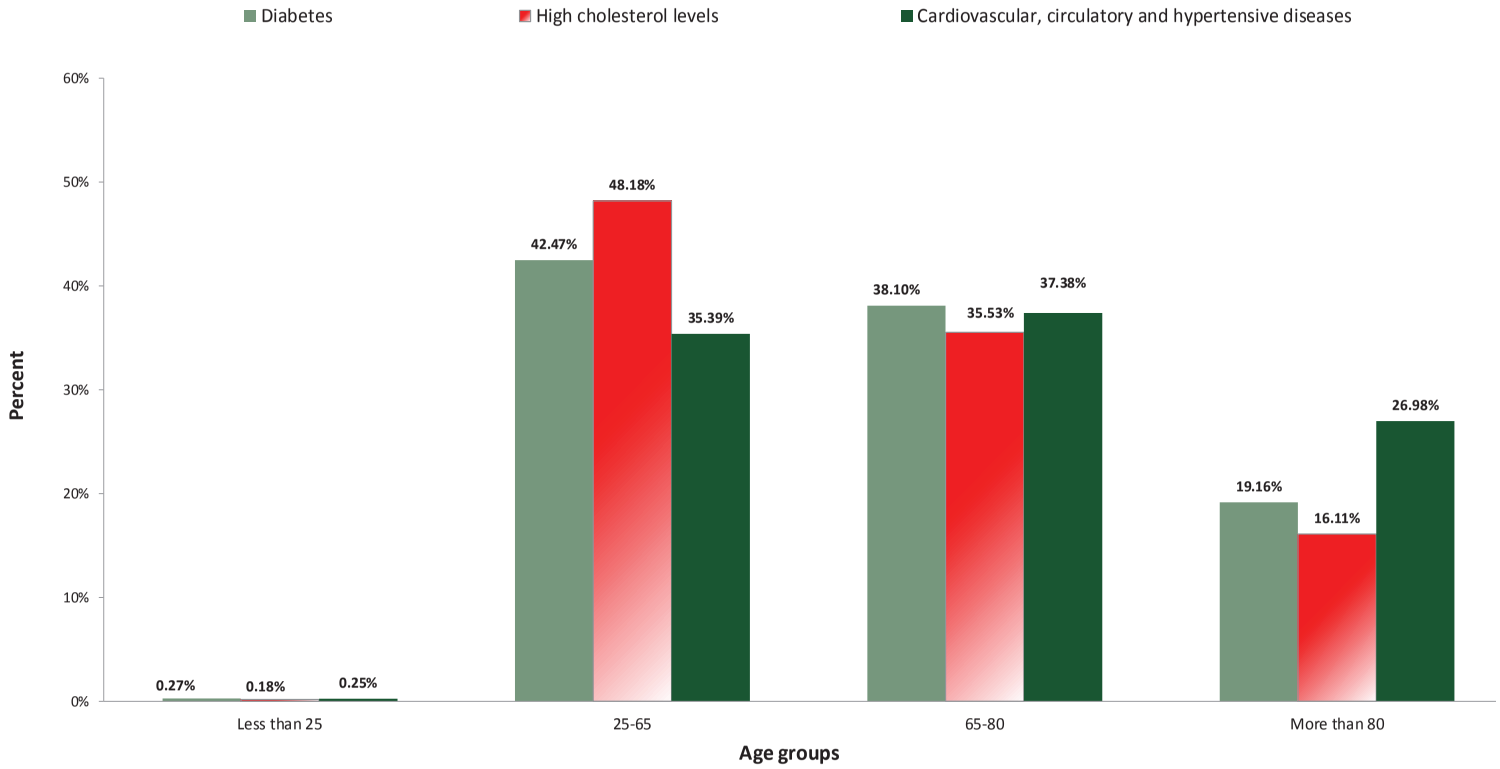
Source: Epidemiological Surveillance Unit, MOPH. (on 16-6-2017)

Table G.1: Vital Data Observatory (VDO) statistics* by Qada and nationality, 2016

Qada	Deliveries		Vaginal Deliveries		Ceasarian Sections		Newborns		Live Births		Live Births less than 2.5 kg		Birth Defects		StillBirths		Abortions & IUFD	Neonatal Deaths		Maternal Deaths	
L/NL	L	NL	L	NL	L	NL	L	NL	L	NL	L	NL	L	NL	L	NL	Total	L	NL	L	NL
Aakkar	5,703	2,373	3,817	1,767	1,886	606	5,764	2,418	5,666	2,348	334	238	64	43	6	1	768	21	12	2	0
Minieh-Danniyeh	862	1,827	628	1,394	234	433	870	1,826	859	1,815	59	206	3	2	0	0	195	0	0	0	2
Tripoli	9,479	4,598	5,314	3,440	4,165	1,158	9,428	4,824	9,338	4,780	604	187	62	16	17	6	1,296	20	17	1	1
Zgharta	1,854	172	691	70	1,163	102	1,912	175	1,896	164	231	28	16	4	2	2	213	10	1	0	0
Koura	2,008	293	990	169	1,018	124	2,078	301	2,052	296	218	58	2	0	11	2	217	5	0	0	0
Bcharreh	26	42	17	29	9	13	26	42	25	39	2	3	0	0	1	3	0	0	0	0	0
Batroun	157	58	61	48	96	10	160	58	157	55	29	20	0	0	0	0	7	1	0	0	0
Hermel	1,156	642	208	316	948	326	1,151	661	1,139	649	59	54	0	0	7	12	205	2	0	0	0
Baalbek	3,429	1,855	784	1,182	2,645	673	3,433	1,935	3,400	1,919	274	201	20	5	3	0	612	25	18	1	0
Zahleh	5,949	4,835	1,910	3,243	4,039	1,592	5,973	4,969	5,907	4,885	593	494	35	35	11	19	726	14	9	2	3
Rachaiya	315	226	136	158	179	68	315	232	311	222	7	11	1	1	1	8	77	2	2	0	0
West Beqaa	429	2,941	174	1,822	255	1,119	423	3,000	412	2,950	20	258	0	0	0	0	237	0	0	0	1
Nabatiyeh	3,514	1,191	1,241	720	2,273	471	3,590	1,205	3,559	1,188	186	110	13	20	11	1	387	16	14	0	1
Hasbaiya	150	107	47	64	103	43	153	107	152	106	15	7	0	0	1	1	72	0	0	0	0
Marjaayoun	608	337	236	233	372	104	612	337	607	335	51	18	1	2	1	0	109	0	1	0	0
Bent Jbayl	793	392	453	313	340	79	798	392	790	382	50	28	5	5	2	4	146	0	0	0	0
Saida	4,559	5,514	2,048	3,101	2,511	2,413	4,583	5,754	4,516	5,685	499	812	16	42	18	17	968	37	127	2	1
Sour	3,362	1,860	1,417	1,127	1,945	733	3,532	1,781	3,519	1,744	313	164	9	6	10	18	716	12	14	0	1
Jezzine	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Jbayl	1,268	102	547	80	721	22	1,332	95	1,307	94	176	8	13	0	3	0	126	3	0	1	0
Keserwan	1,169	1,263	512	789	657	474	1,202	1,257	1,192	1,237	161	96	9	2	2	13	131	2	4	0	0
Matn	4,780	1,679	1,812	923	2,968	756	4,998	1,628	4,969	1,618	525	152	7	1	4	2	543	8	3	0	0
Baabda	9,749	4,457	4,309	2,745	5,440	1,712	10,068	4,456	9,972	4,347	868	406	120	86	10	10	1,889	46	39	1	3
Aaley	330	1,258	146	957	184	301	338	1,267	338	1,257	16	52	0	3	0	3	105	0	0	0	0
Chouf	1,175	3,155	521	2,253	654	902	1,182	3,199	1,168	3,109	92	604	4	11	2	29	490	6	35	0	0
Beirut	7,287	2,736	3,555	1,837	3,732	899	7,671	2,638	7,585	2,566	826	335	59	7	25	21	1,083	27	1	1	0
Total	**70,111**	**43,914**	**31,574**	**28,780**	**38,537**	**15,134**	**71,592**	**44,558**	**70,836**	**43,791**	**6,208**	**4,550**	**459**	**291**	**148**	**172**	**11,318**	**257**	**297**	**11**	**13**

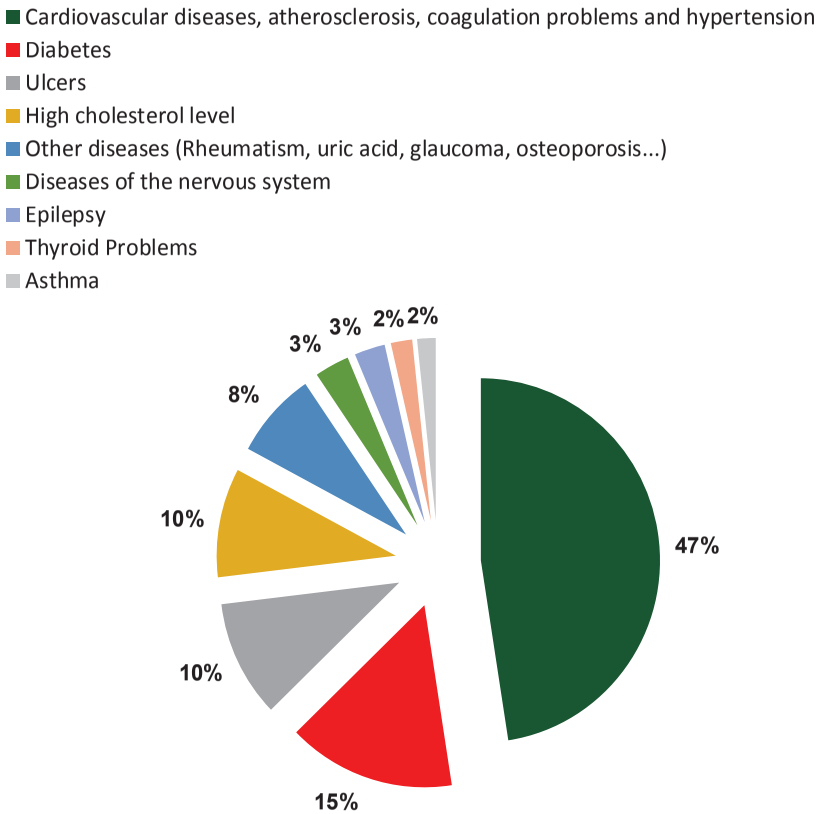
**Previously known as Maternal Neonatal Mortality Notification System (MNMNS)*
L= Lebanese; NL=Non-Lebanese
Source: Vital Data Observatory (VDO), MOPH

Graph H.1: Proportion of beneficiaries from the MOPH chronic drugs' program by age group and medical condition, 2016



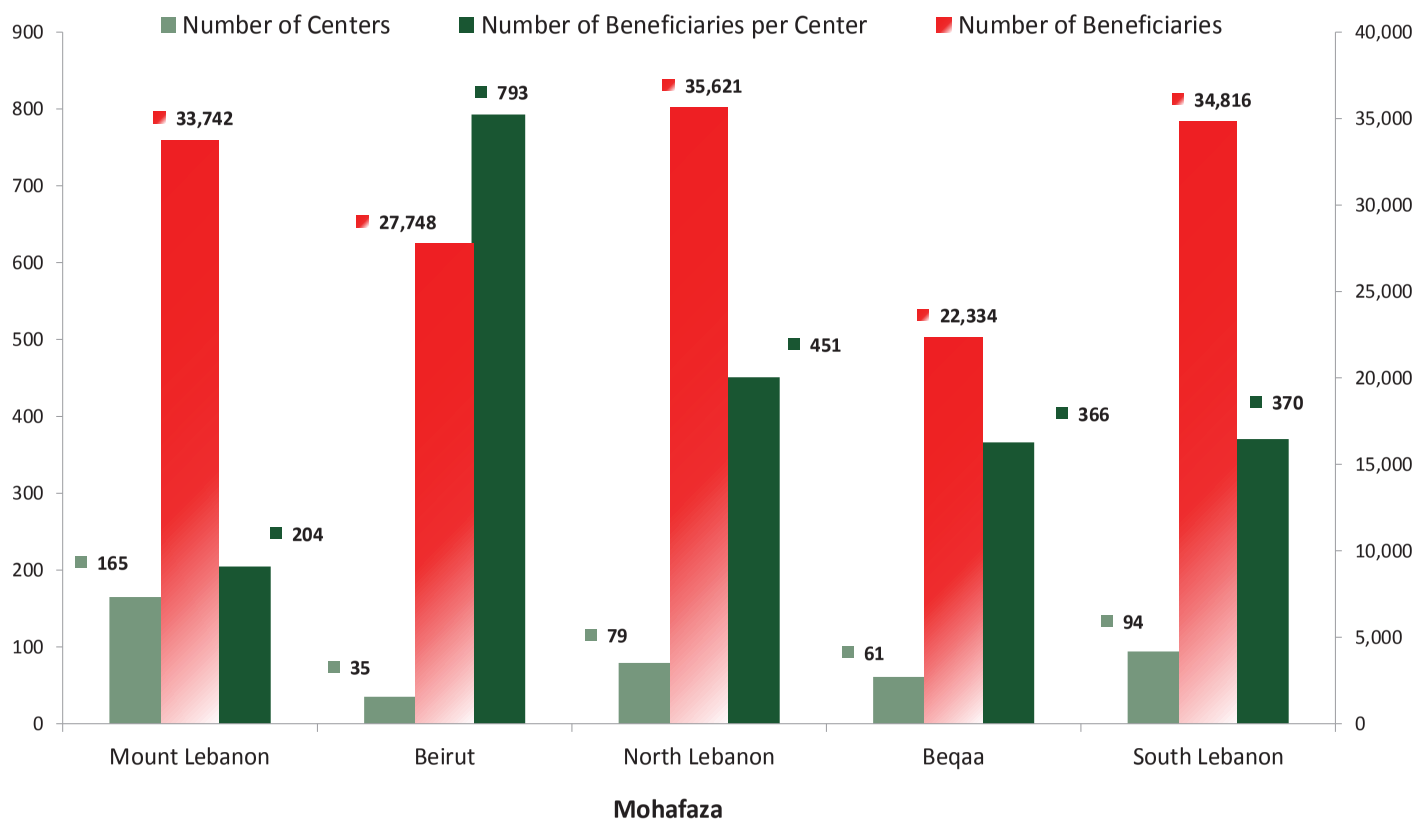
Source: Chronic drugs program, MOPH, YMCA

Graph H.2: Distribution of chronic conditions among users of chronic drugs, 2016



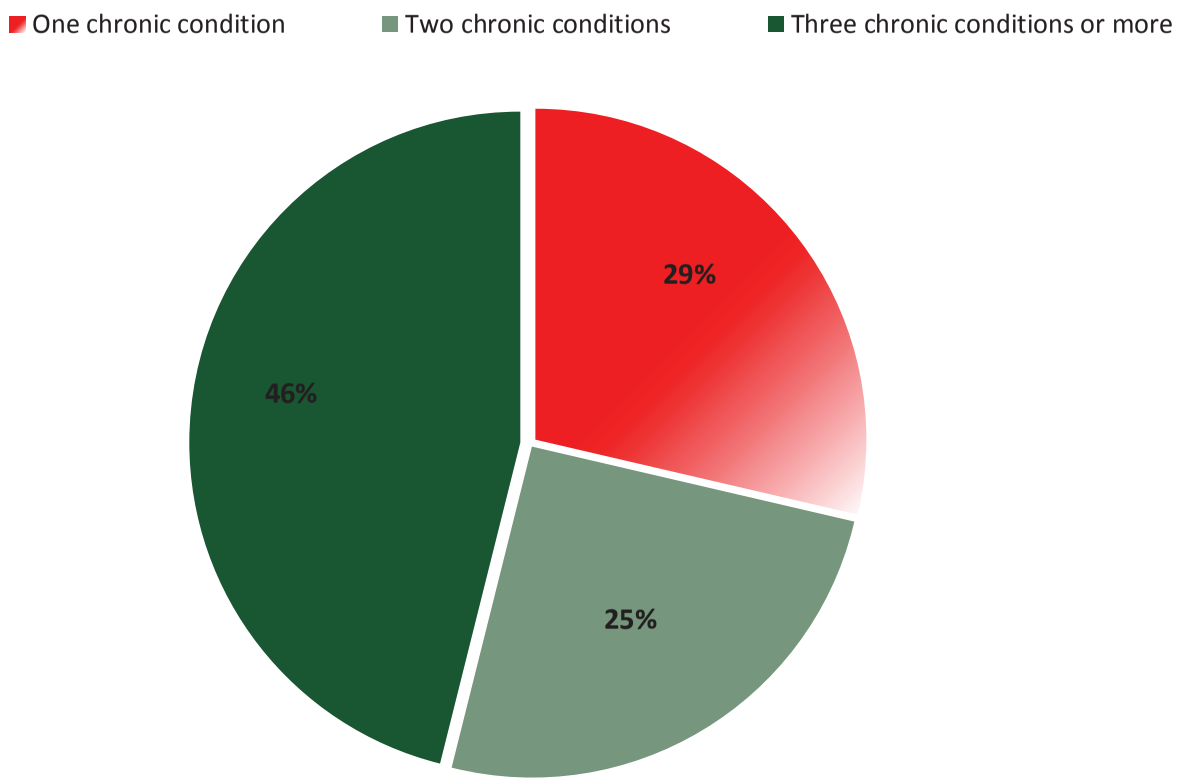
Source: Chronic drugs program, MOPH, YMCA

Graph H.3: Socio-medical centers and beneficiaries per center by Mohafaza, 2016



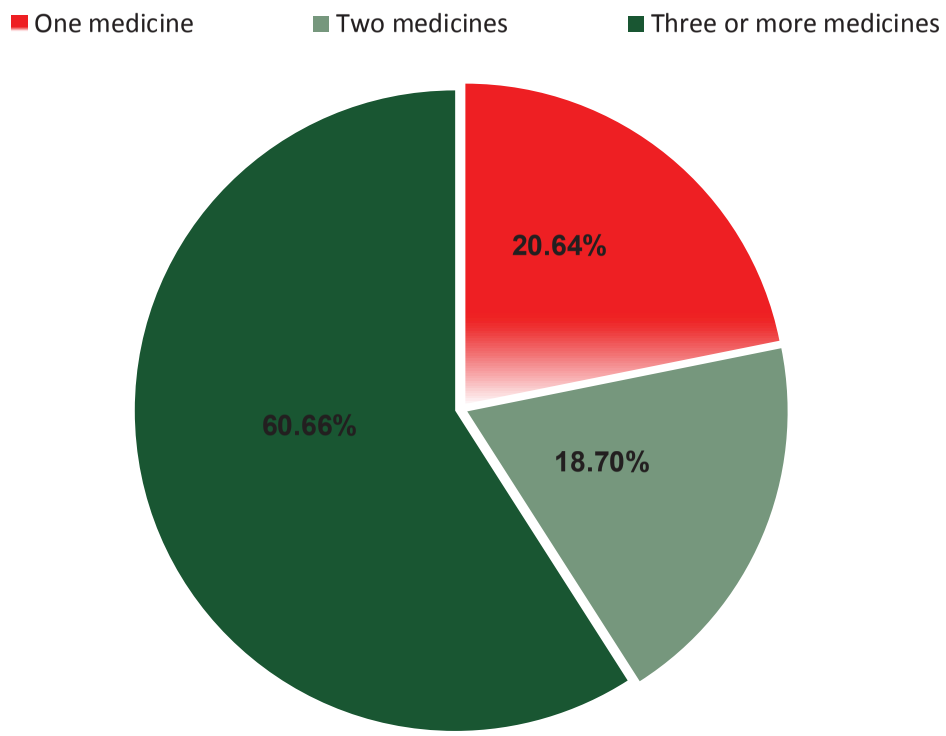
Source: Chronic drugs program, MOPH, YMCA

Graph H.4: Proportion of patients suffering from chronic conditions, 2016



Source: Chronic drugs program, MOPH, YMCA

Graph H.5: Proportion of patients taking medications 2016



Source: Chronic drugs program, MOPH, YMCA

Table I.1: National health accounts of Lebanon, 2012-Summary table

Amounts in 000 LL

FINANCING INTERMEDIARIES	FUNDING SOURCES					EXPENDITURES
	Households		Employer	Treasury	Extra budgetary	
	Fees for Services (out of pocket)	Contributions/ Premiums	Contributions/ Premiums		Donations / Loans	
Ministry of Public Health				647,220,844		647,220,844
National Social Security Fund		120,608,667	422,130,333	145,005,250		687,744,250
Civil Servants Cooperative		33,110,290		250,000,000		283,110,290
Army				240,985,225		240,985,225
Internal Security Forces				97,870,001		97,870,001
State Security Forces				9,494,444		9,494,444
Customs				7,346,716		7,346,716
General Security Forces				18,445,265		18,445,265
Private Insurance		446,992,958	292,391,892			739,384,850
Mutual Funds		128,011,108		31,000,000		159,011,108
International Organizations					21,793,445	21,793,445
Households	1,735,230,986					1,735,230,986
TOTAL	**1,735,230,986**	**728,723,023**	**714,522,225**	**1,447,367,745**	**21,793,445**	**4,647,637,424**
%Total Health Expenditure	**37.34**	**15.68**	**15.37**	**31.14**	**0.47**	**100**

GDP (2012 preliminary figures, MOF)		64,800,000,000
THE % GDP 2012		7.17
Public (%)		31.14
Private (%)		68.39
Households (Out Of Pocket and contributions)	*53.02*	
OOP	*37.34*	
Contributions	*15.68*	
Employers (contributions)	*15.37*	
Donors (%)		0.47

* USD exchange rate= 1507.5 LBP

Source: National Health Accounts (NHA 2012), MOPH.

Acknowledgments

This Bulletin would not have existed without the kind and dedicated collaboration of the following:

- His Excellency the Minister of Public Health, *Mr. Ghassan Hasbani*.
- His Excellency the Director General of the Ministry of Public Health, *Dr. Walid Ammar*.

And colleagues at the:

- Directorate of Preventive Health Care.
- Directorate of Medical Care.
- Service of Pharmacy.
- Department of Accounting.
- Department of Health Education.
- Department of Information Technology.
- Department of Primary Health Care.
- Department of Projects & Programs.
- Epidemiological Surveillance Unit.
- Medical Professions Section.
- District Health Departments.
- Drug Dispensing Center (DDC).
- Expanded Program on Immunization.
- National AIDS Control Program.
- National E-Health Program.
- National Tuberculosis Control Program.
- YMCA.
- Malaria Eradication Bureau.
- Ministry of Interior and Municipalities.

And:

- The World Health Organization (WHO).

Special thanks to Ms. Carine El-Sokhn, Ms. Soha Hourani and Ms. Cherine Barakat

Head of Statistics Department

Hilda Harb