Middle **E**ast **C**onsortium on **I**nfectious **D**iseases **S**urveillance

MECIDS

Regional Technical Report

2014

MECIDS

Middle East Consortium on
Infectious Disease Surveillance

MESIS
معهد الشرق الأوسط للأمن
Middle East Scientific Institute For Security

NTI
BUILDING A SAFER WORLD

Definitions

Human specimens	Source of specimens "blood or stool" from patients or stool from food handlers
Non human specimens	Source of specimens "food items, drinking water or waste water"

Tables and Figures

Regional Data analysis (2005-2014)

The total number of tested specimens in 2014 at regional level was 87424, yielded 944 isolates raising the cumulative number of specimens from all three partners for the period 2005 - 2014 to 885040, with total 10855 isolates.
According to the source of specimens Salmonella isolates in 2014 were divided into human specimens (blood, stool or urine) which yielded 850 isolates and non-human specimens (Food items or water) which yielded 94 isolates.

Table 1; Distribution of tested Specimens and Salmonella isolates by source of specimens, year and MECIDS partners, 2005-2014

Source of Specimens	Country	Description	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Human	Israel	Specimens	70272	69689	42617	39209	33586	36269	34378	33669	30941	32766	423396
		Isolates	776	986	889	929	952	1048	1004	843	877	782	9086
		Isolationreate/1000	11	14	21	24	28	29	29	25	28	24	21
	Jordan	Specimens	5000	11599	13174	13102	13759	13304	13339	17396	20189	21487	142349
		Isolates	53	93	90	51	35	58	32	47	40	61	560
		Isolationreate/1000	11	8	7	4	3	4	2	3	2	3	4
	Palestine	Specimens	12842	6921	302	343	143	152	136	599	940	3023	25401
		Isolates	80	52	35	15	31	2	3	8	23	7	256
		Isolationreate/1000	6	8	116	44	217	13	22	13	24	2	10
	All Human	Specimens	88114	88209	56093	52654	47488	49725	47853	51664	52070	57276	591146
		Isolates	909	1131	1014	995	1018	1108	1039	898	940	850	9902
Non Human specimens	Israel	Specimens	0	0	0	0	0	0	0	0	0	0	0
		Isolates	0	0	0	0	0	0	0	0	0	0	0
		Isolationreate/1000	0	0	0	0	0	0	0	0	0	0	0
	Jordan	Specimens	9422	22290	24769	30050	33559	25990	20308	21411	19832	22782	230413
		Isolates	0	10	7	13	21	8	18	11	35	41	164
		Isolationreate/1000	0.0	0.4	0.3	0.4	0.6	0.3	0.9	0.5	1.8	1.8	0.7
	Palestine	Specimens	8807	5315	4685	5975	7483	6555	5320	6154	5821	7366	63481
		Isolates	113	77	91	100	106	68	42	58	81	53	789
		Isolationreate/1000	13	14	19	17	14	10	8	9	19	19	12
	All Non Human	Specimens	18229	27605	29454	36025	41042	32545	25628	27565	25653	30148	293894
		Isolates	113	87	98	113	127	76	60	69	116	94	953
All	MECIDS	Total Specimens	106343	115814	85547	88679	88530	82270	73481	79229	77723	87424	885040
		Total Isolates	1022	1218	1112	1108	1145	1184	1099	967	1056	944	10855
		Isolationreate/1000	10	11	13	12	13	14	15	12	14	11	12

Data collection in Israel began on January 2005; the total Number of specimens from Israel does not include the number of food specimens
Data collection in Jordan began on July 2005
Data collection in Palestine began on January 2005; there is no data within the period August-December 2006

Blood specimens yielded 13 isolates; stool specimens from patients or food handlers yielded 837 isolates.
Non human specimens collected from food items (Jordan and Palestine), yielded 94 isolates; there weren't data concerning non human specimens from Israel

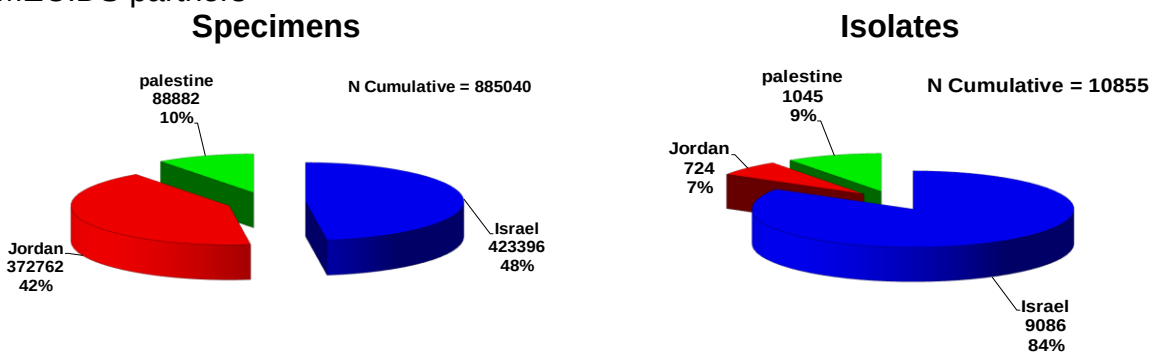
The following table illustrates the distribution of the Salmonella isolates by source of specimens, year and by MECIDS partners, table 2.

Table 2; Distribution of Salmonella isolates, by MECIDS partners, source of specimens and by year, 2005-2014

years			2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Human	Blood specimens	Israel	23	32	19	29	33	13	14	15	25	13	216
		Jordan	6	2	3	0	1	1	0	4	0	0	17
		Palestine	0	0	0	0	0	0	0	1	0	0	1
		Total	29	34	22	29	34	14	14	20	25	13	234
	Stool specimens*	Israel	753	954	869	900	920	1035	990	828	852	769	8870
		Jordan	47	92	87	51	34	57	32	43	40	61	544
		Palestine	80	52	34	15	30	2	3	8	23	7	254
		Total	880	1098	990	966	984	1094	1025	879	915	837	9668
Total Human			909	1132	1012	995	1018	1108	1039	899	940	850	9902
Non Human specimens		Israel	0	0	0	0	0	0	0	0	0	0	0
		Jordan	0	10	7	13	21	8	18	11	35	41	164
		Palestine	113	77	91	100	106	68	42	58	81	53	789
		Total	113	87	98	113	127	76	60	69	116	94	953
Grand Total			1022	1219	1110	1108	1145	1184	1099	968	1056	944	10855

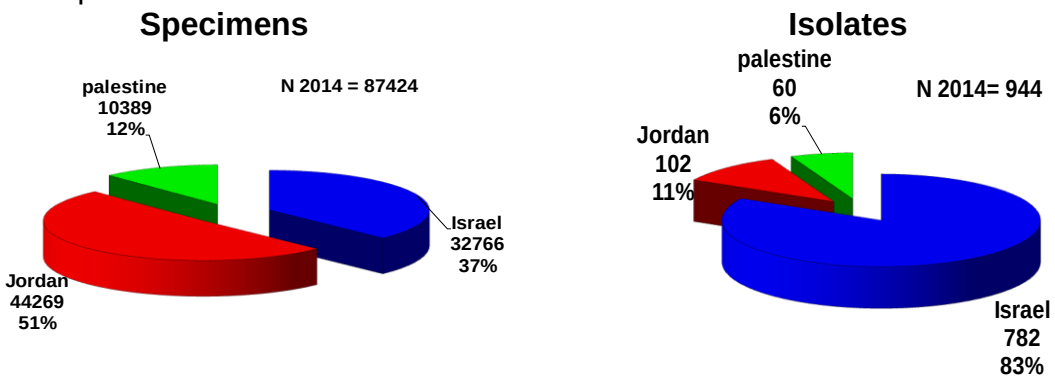
Out of the total 885040 specimens which represents the cumulative number of tested specimens in the period 2005-2014 from MECIDS partners; 423396 (48%) were from Israel yielded 9086 isolates (84%), 372762 (42%) were from Jordan which yielded 724 (7%) isolates and 88882 (10%) from Palestine yielded 1045 isolates (9%).

Figure 1; Distribution of Salmonella Specimens and Salmonella isolates, 2005-2014 by MECIDS partners

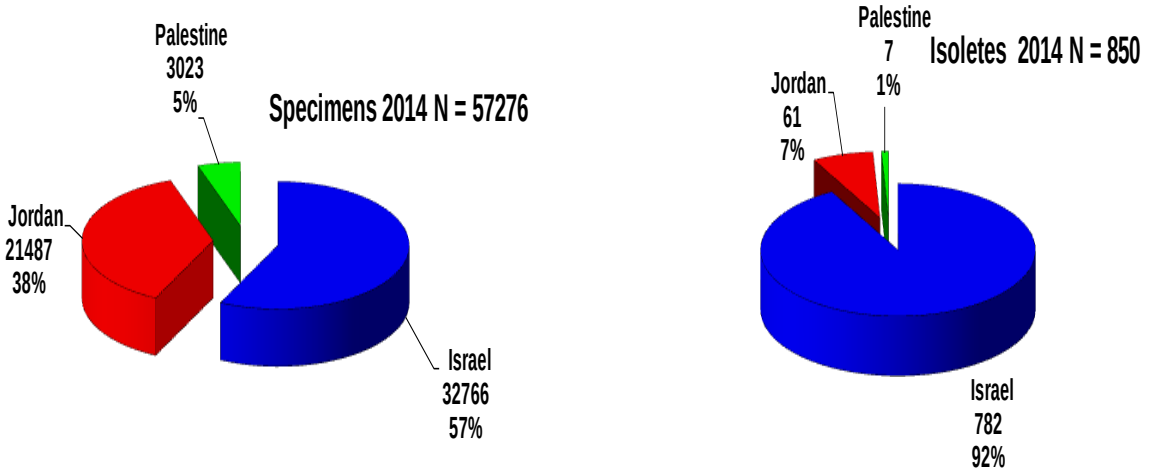


In 2014, 83% of isolates were from Israel, 11% of isolates were from Jordan and 6% of isolates were from Palestine figure 2.

Figure 2; Distribution of Salmonella Specimens and Salmonella isolates, 2014 by MECIDS partners

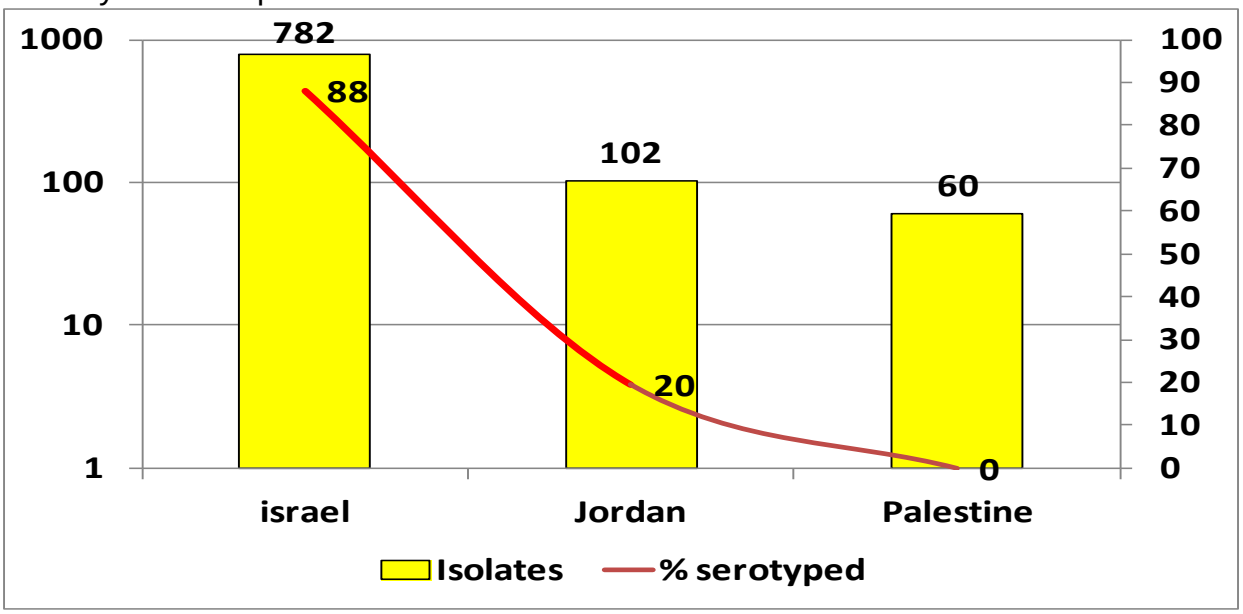


The cumulative number of specimens from human source for the period 2005-2014 from MECIDS project partners was 591146 specimens, yielded 9902 isolates; almost 92% of the yielded isolates were from Israel, 6% from Jordan and 2% from Palestine.
In 2013 the number of specimens was 57276 specimens, yielded 850 isolates; almost 92% of the yielded isolates were from Israel, 7% from Jordan and 1% from Palestine figure 3.
Figure 3; Distribution of Salmonella isolates from human specimens, 2005-2014 and 2014 by MECIDS partners



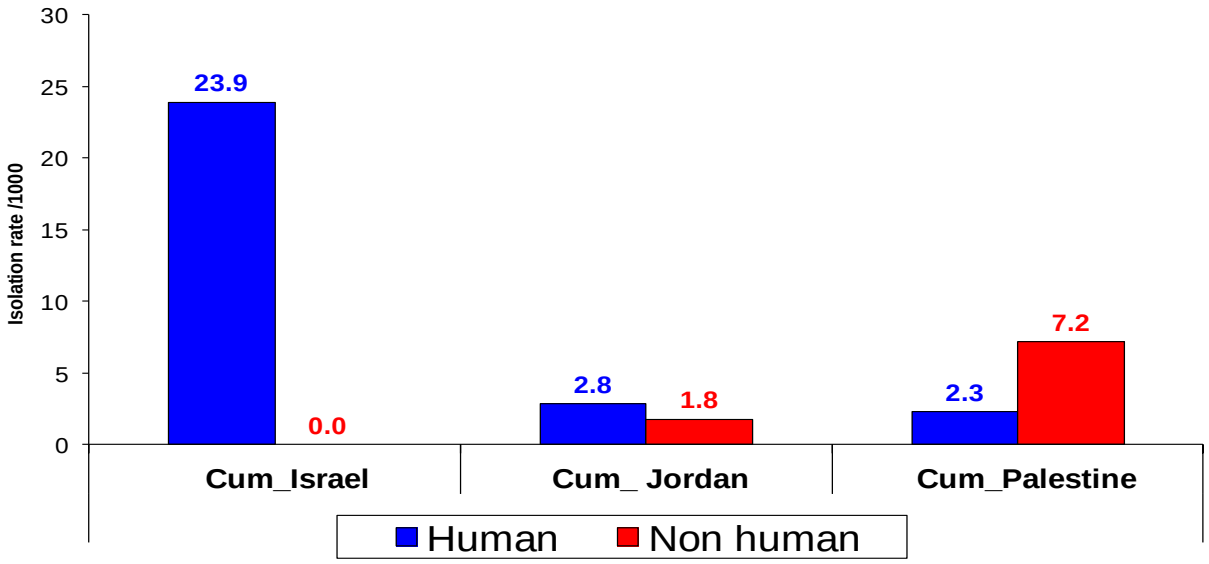
In 2014, 708 isolates were Serotyped, the proportion of serotyping from the yielded isolates were 88%, 20% and 0% were from Israel, Jordan and Palestine respectively. figure 4.

Figure 4; Distribution of identified Salmonella isolates and proportion of serotyping in 2014 by MECIDS partners



In 2014 the isolation rate for human specimens was 23.9, 2.8 and 2.3/1000 for Israel, Jordan and Palestine respectively, but for the non human specimens for Jordan was 1.8/1000 and for Palestine 7.2 /1000; there are no non human specimens from Israel; figure 5.

Figure 5; Salmonella isolation Rate/1000, from both human and non human Specimens 2005-2014 by country



The following summary table illustrates total number of tested specimens “both human and non human”, number of Salmonella isolates, number of serogrouped and of Serotyped Salmonella isolates from MECIDS partners by year, table 3.

Table 3; Total Salmonella isolates from MECIDS partners by Serogroups and year of isolation, 2005-2014

	Israel										Jordan										palestine										Cumulative			
Salmonella Seogroups	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Cum_Israel	Cum_ Jordan	Cum_Palestine	Grand total
Salmonella A	3	9	6	3	20	2	1	4	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	52	2	0	54
Salmonella B	144	141	89	110	82	90	100	82	59	86	11	32	10	18	16	24	14	20	36	53	4	20	22	14	26	9	3	4	21	0	983	234	123	1340
Salmonella C	0	23	13	28	6	29	28	11	36	28	0	0	0	0	0	0	0	0	0	0	0	4	21	1	0	0	0	0	0	1	202	0	27	229
Salmonella C1	185	301	254	265	394	434	425	411	172	286	4	7	5	8	10	4	4	0	7	11	4	40	24	16	27	36	21	39	31	28	3127	60	266	3453
Salmonella C2	107	187	138	145	114	111	94	79	50	139	9	25	7	12	3	10	6	8	7	11	2	39	31	26	23	2	10	6	5	12	1164	98	156	1418
Salmonella C2-C3	5	1	2	4	3	7	5	7	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	38
Salmonella C3	12	6	6	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	28	0	8	36
Salmonella D	240	250	172	168	237	219	154	83	57	123	19	20	45	9	23	18	9	13	11	10	5	5	5	2	1	2	0	0	0	0	1703	177	20	1900
Salmonella D1	0	0	1	4	3	5	1	4	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	2	2	1	2	3	0	20	0	13	33
Salmonella E	13	20	24	35	14	23	18	19	4	24	4	12	17	9	3	1	3	11	8	6	0	3	16	20	4	0	3	2	15	11	194	74	74	342
Salmonella E1	0	1	0	1	6	6	1	4	1	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	23	1	0	24
Salmonella F	1	1	0	1	4	8	0	0	0	4	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	19	2	0	21
Salmonella G	3	9	2	12	10	18	102	18	16	9	0	1	2	1	1	3	1	0	0	0	0	1	0	0	0	0	0	0	0	0	199	9	1	209
Salmonella H	0	1	2	0	0	2	0	0	0	1	0	0	2	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	5	0	11
Salmonella I	22	3	13	12	20	13	3	11	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	0	0	98
Salmonella K	1	1	0	0	0	0	3	2	1	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	3	0	12
Salmonella L	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	1	0	0	1
Salmonella M	3	5	5	0	2	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	2	0	19
Salmonella N	0	0	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5
Salmonella O	1	1	3	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	10	0	0	10
Salmonella Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella P	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
Salmonella Q	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	1	0	0	1
Salmonella R	0	1	0	1	5	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9
Salmonella S	0	2	0	1	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8
Salmonella spp.	34	22	158	131	29	68	64	93	471	64	6	6	8	4	0	2	10	5	4	11	0	0	0	1	1	1	4	2	0	0	1134	56	9	1199
Salmonella T	0	0	0	1	1	3	0	3	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12
Salmonella X	1	0	0	2	1	5	1	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	18
Salmonella Y	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Salmonella Z	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	1	0	0	1
Total No. specimens	70272	69689	42617	39209	33586	36269	34378	33669	30941	32766	14422	33889	37943	43152	47318	39294	33647	38807	40021	44269	21649	12236	4987	6318	7626	6707	5456	6753	6761	10389	423396	372762	88882	885040
Total No. Isolates	776	986	889	929	952	1048	1004	843	877	782	53	103	97	64	56	66	50	58	75	102	193	129	126	115	137	70	45	66	104	60	9086	724	1045	10855
Total No. serogrouped isolates	776	986	889	929	952	1048	1004	843	351	577	53	103	97	64	56	66	50	58	75	84.0	24	112	119	82	84	52	40	54	75	52	8355	706	694	9755
Isolation Rate/1000	11.0	14.1	20.9	23.7	28.3	28.9	29.2	25.0	28.3	23.9	10.6	8.5	7.1	4.3	3.2	4.7	3.3	3.2	3.7	4.6	19.1	22.0	135.3	60.5	230.9	23.5	30.0	22.8	38.4	9.5	21.5	4.6457586	23	12
Total Serotyped Salmonella Isolates	740	941	719	748	917	947	918	734	283	688	23	19	39	9	6	9	6	17	5	20	22	0	5	0	6	11	8	23	27	0	7635	153	102	

The following summary table illustrates Salmonella isolates from human specimens for the period 2005-2013 by Serogroups and year of isolation, table 4.

Table 4; Total Salmonella isolates from human specimens by Serogroups and year of isolation 2005-2014

Salmonella Seogroups	Israel										Jordan										palestine										Cumulative			
	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Cum_Israel	Cum_Jordan	Cum_Palestine	Grand total
Salmonella A	3	9	6	3	20	2	1	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	0	0	52
Salmonella B	144	141	89	110	82	90	100	82	59	86	11	30	9	11	9	22	9	14	19	36	1	2	4	0	3	0	0	1	17	0	983	170	28	1181
Salmonella C	0	23	13	28	6	29	28	11	36	28	0	0	0	0	0	0	0	0	0	0	0	4	21	0	0	0	0	0	0	0	202	0	25	227
Salmonella C1	185	301	254	265	394	434	425	411	172	286	4	6	5	6	7	3	1	0	3	5	0	35	4	0	0	2	1	3	2	6	3127	40	53	3220
Salmonella C2	107	187	138	145	114	111	94	79	50	139	9	24	7	11	3	10	5	7	6	7	0	4	0	1	2	0	0	0	0	0	1164	89	7	1260
Salmonella C2-C3	5	1	2	4	3	7	5	7	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	38
Salmonella C3	12	6	6	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	28	0	2	30
Salmonella D	240	250	172	168	237	219	154	83	57	123	19	15	39	9	14	16	7	13	6	4	0	2	4	0	0	0	0	0	0	0	1703	142	6	1851
Salmonella D1	0	0	1	4	3	5	1	4	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3	0	20	0	5	25
Salmonella E	13	20	24	35	14	23	18	19	4	24	4	11	17	8	2	1	2	9	3	5	0	0	2	2	0	0	1	0	1	1	194	62	7	263
Salmonella E1	0	1	0	1	6	6	1	4	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	23
Salmonella F	1	1	0	1	4	8	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1	0	20
Salmonella G	3	9	2	12	10	18	102	18	16	9	0	1	2	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	199	4	1	204
Salmonella H	0	1	2	0	0	2	0	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	4	0	10
Salmonella I	22	3	13	12	20	13	3	11	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	0	0	98
Salmonella K	1	1	0	0	0	0	3	2	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2	0	11
Salmonella L	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	1	0	0	1
Salmonella M	3	5	5	0	2	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	2	0	19
Salmonella N	0	0	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5
Salmonella O	1	1	3	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	10	0	0	10
Salmonella Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella P	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
Salmonella Q	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	1	0	0	1
Salmonella R	0	1	0	1	5	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9
Salmonella S	0	2	0	1	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8
Salmonella spp.	34	22	158	131	29	68	64	93	471	64	6	6	8	3	0	2	7	4	3	4	0	0	0	1	1	0	0	2	0	0	1134	43	4	1181
Salmonella T	0	0	0	1	1	3	0	3	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12
Salmonella X	1	0	0	2	1	5	1	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	18
Salmonella Y	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Salmonella Z	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	1	0	0	1
Total No. specimens	70272	69689	42617	39209	33586	36269	34378	33669	30941	32766	5000	11599	13174	13102	13759	13304	13339	17396	20189	21487	12842	6921	302	343	143	152	136	599	940	3023	423396	142349	25401	591146
Total No. Isolates	776	986	889	929	952	1048	1004	843	877	782	53	93	90	51	35	58	32	47	40	61	80	52	35	15	31	2	3	8	23	7	9086	560	256	9902
Total No. serogrouped isolates	776	986	889	929	952	1048	1004	843	351	577	53	93	90	51	35	58	32	47	40	45	4	48	35	4	6	2	3	6	23	7	8355	544	138	9037
Isolation Rate/1000	11.0	14.1	20.9	23.7	28.3	28.9	29.2	25.0	28.3	23.9	10.6	8.0	6.8	3.9	2.5	4.4	2.4	2.7	2.0	2.8	6.2	7.5	115.9	43.7	216.8	13.2	22.1	13.4	24.5	2.3	21	4	10	17

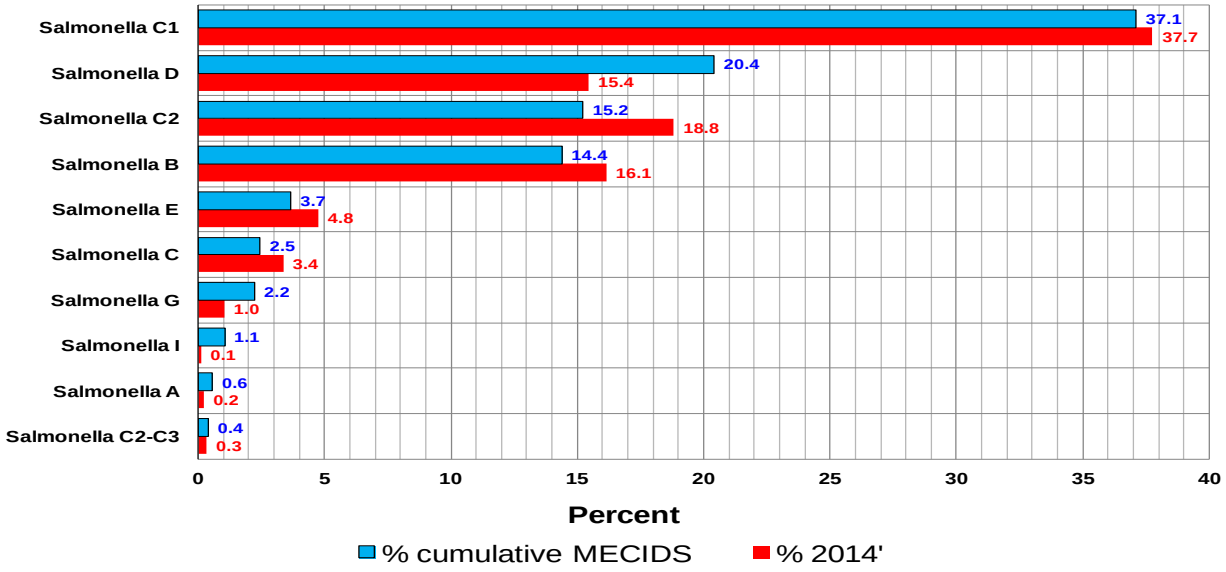
The following summary table illustrates Salmonella isolates from non human specimens by Serogroups and year of isolation, table 5.

Table 5; Total non human Salmonella isolates from MECIDS partners by Serogroups and year of isolation, 2005-2014

Salmonella Seogroups	Israel										Jordan										palestine										Cumulative			
	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Cum_Israel	Cum_ Jordan	Cum_Palestine	Grand total
Salmonella A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Salmonella B	0	0	0	0	0	0	0	0	0	0	0	2	1	7	7	2	5	6	17	17	3	18	18	14	23	9	3	3	4	0	0	64	95	159
Salmonella C	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	1	0	0	2	2
Salmonella C1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	1	3	0	4	6	4	5	20	16	27	34	20	36	29	22	0	20	213	233
Salmonella C2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	1	4	2	35	31	25	21	2	10	6	5	12	0	9	149	158
Salmonella C2-C3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella C3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6	6
Salmonella D	0	0	0	0	0	0	0	0	0	0	0	5	6	0	9	2	2	0	5	6	5	3	1	2	1	2	0	0	0	0	0	35	14	49
Salmonella D1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	2	2	2	0	2	0	0	0	0	8	8
Salmonella E	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	2	5	1	0	3	14	18	4	0	2	2	14	10	0	12	67	79
Salmonella E1	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	1
Salmonella F	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	1	0	1
Salmonella G	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
Salmonella H	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	1	0	1
Salmonella I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella K	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	1	0	1
Salmonella L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella Q	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella spp.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	1	1	7	0	0	0	0	0	1	4	0	0	0	0	13	5	18
Salmonella T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella X	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella Y	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonella Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total No. specimens	0	0	0	0	0	0	0	0	0	0	9422	22290	24769	30050	33559	25990	20308	21411	19832	22782	8807	5315	4685	5975	7483	6555	5320	6154	5821	7366	0	230413	63481	293894
Total No. Isolates	0	0	0	0	0	0	0	0	0	0	0	10	7	13	21	8	18	11	35	41	113	77	91	100	106	68	42	58	81	53	0	164	789	953
Total No. serogrouped isolates	0	0	0	0	0	0	0	0	0	0	0	10	7	13	21	8	18	11	35	39	20	64	84	78	78	50	37	48	52	45	0	162	556	718
Isolation Rate/1000	0	0	0	0	0	0	0	0	0	0	0.0	0.4	0.3	0.4	0.6	0.3	0.9	0.5	1.8	1.8	12.8	14.5	19.4	16.7	14.2	10.4	7.9	9.4	13.9	7.2	0	0.7	12.4	3

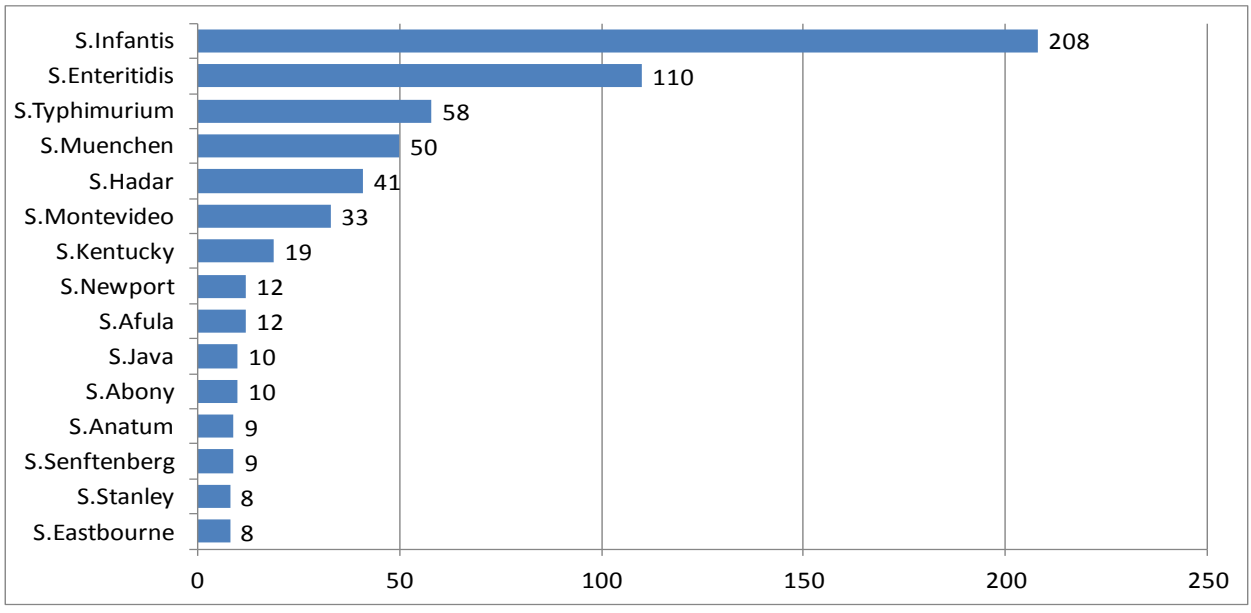
The most common Salmonella Serogroups identified at the regional level in 2014 were Salmonella group C1 (37.7%), Salmonella group C2 (18.8%), Salmonella group B (16.1%), and Salmonella group D (15.4%).
Compared with the dominant pattern in 2005-2014 there is an evident decrease in group D and increase in group C2 and B. figure 6.

Figure 6; Top ten sero-grouped Salmonella Isolates, MECIDS 2014 compared with cumulative 2005-2013



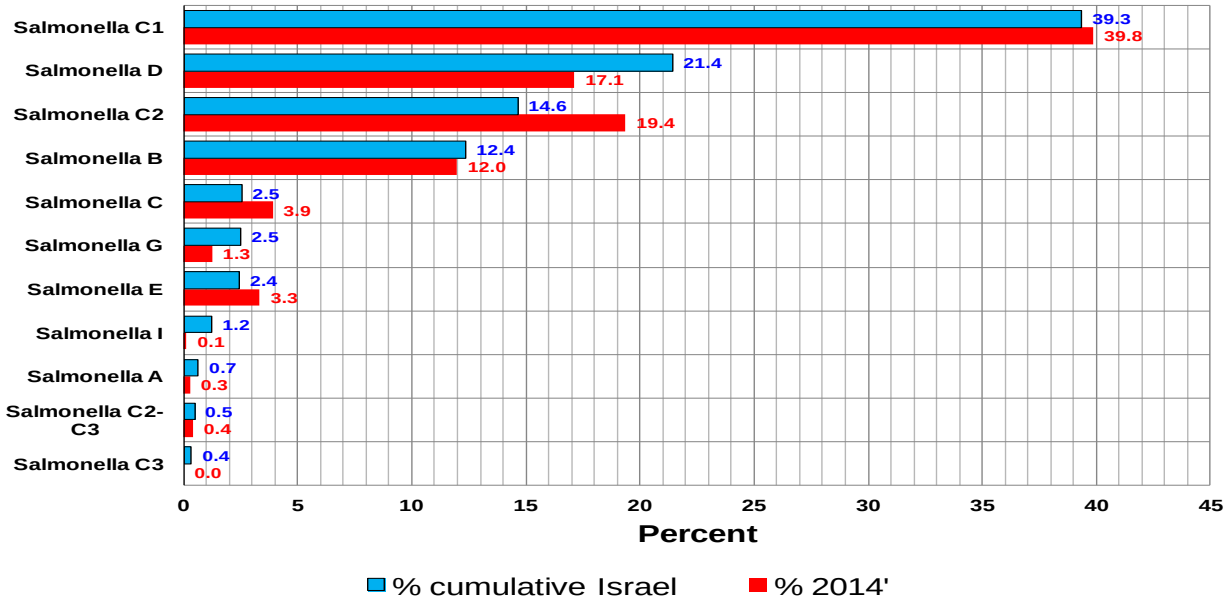
The most common Salmonella Serotype in 2014 at the regional level were S. Infantis, S. Entiritidis and S. Typhimurium Figure 7

Figure 7. Top 15 sero-typed Salmonella Isolates, MECIDS, 2014



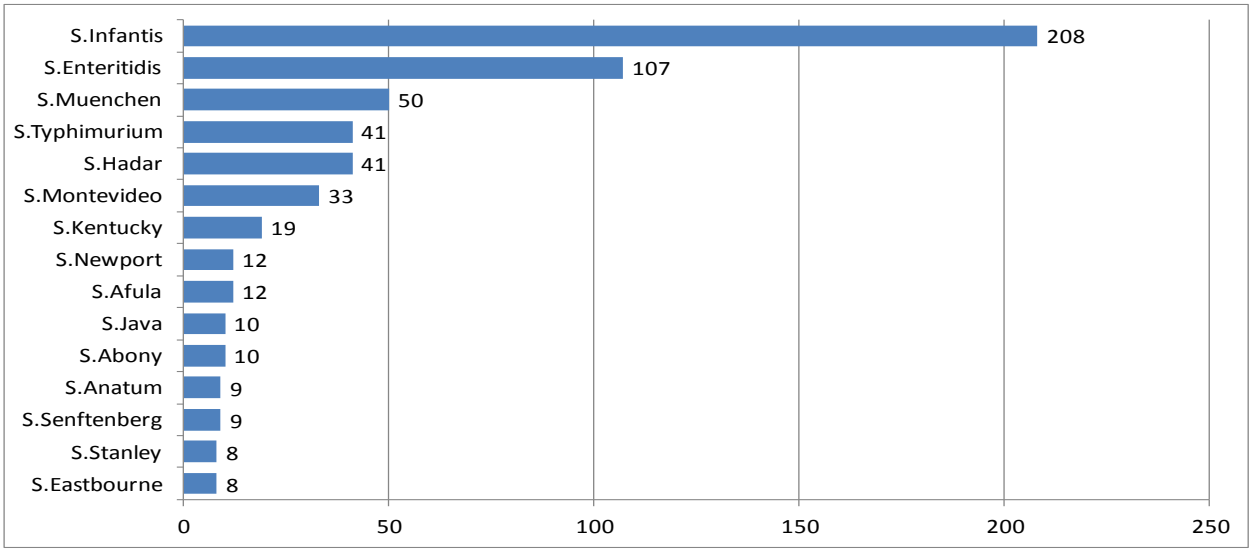
The most common Salmonella Serogroups tested in Israel (2014) were Salmonella group C1 (39.8%), Salmonella group C2 (19.4%); followed by Salmonella group D (17.1%); with an evident increase in group C2 and decrease in group D figure 7.

Figure 8; Top ten Sero-grouped Salmonella Isolates, Israel 2014 compared with cumulative 2005-2014



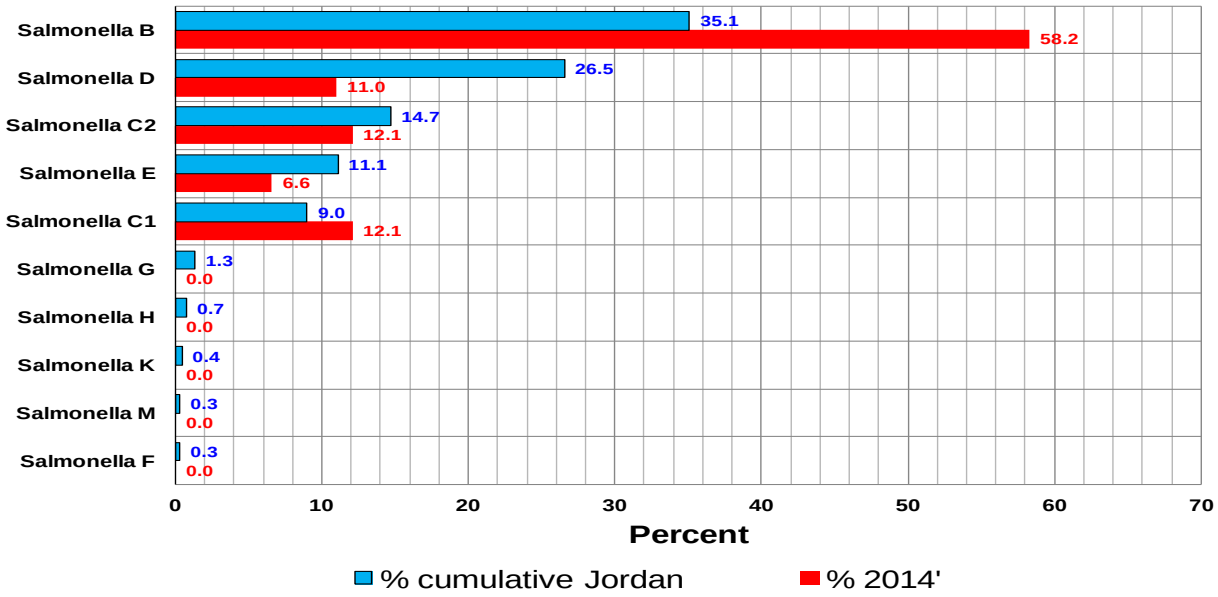
As the isolates are mostly from Israel, the pattern of Salmonella Serotype in 2014 in Israel is predominate for MECIDS, these are S. infantis, S. enteritidis and S. muenchen

Figure 9 Top ten sero-typed Salmonella Isolates, Israel, 2014



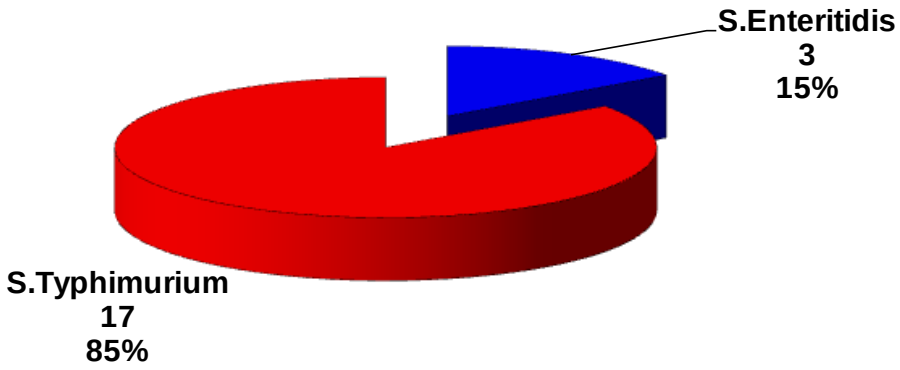
The most common Salmonella Serogroups tested in Jordan in 2014 were Salmonella group B (58.2%) followed by Salmonella group C1 and C2 (12.1%) and Salmonella D (11.0%); there is an evident increase in Group B and an evident decrease in group D figure 8.

Figure 10; Top ten Sero-grouped Salmonella Isolates, Jordan 2014 compared with cumulative 2005-2014



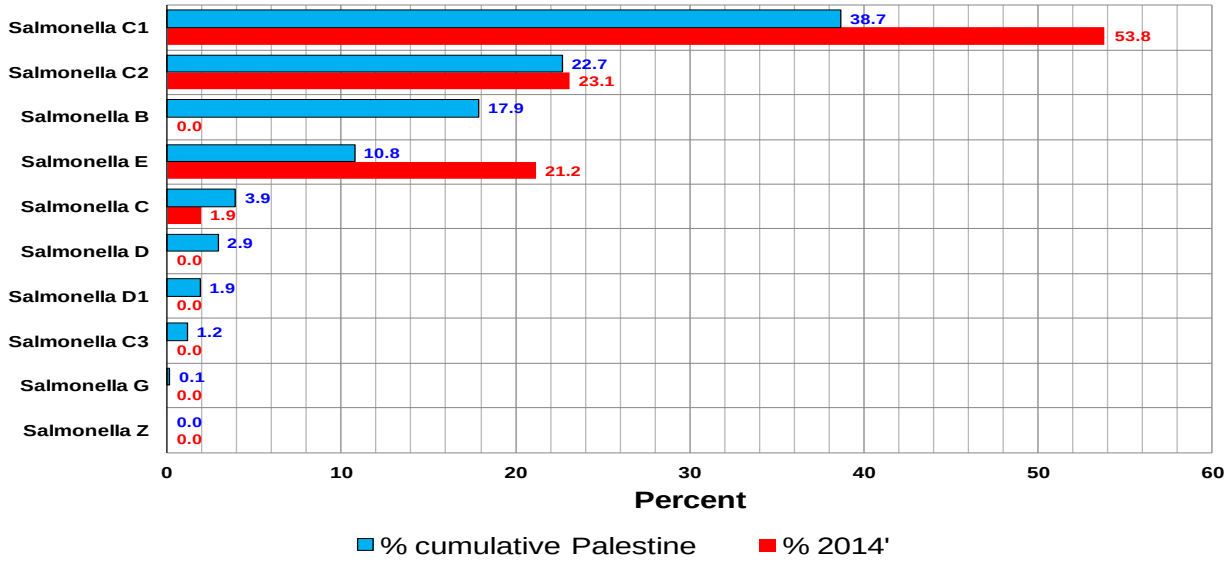
Isolates were serotyped for the most prevalent seotyps identified, in 2014 two serotypes were identified from 20 isolates 15% were S. entiritidis and 85% were S. typhimurium

Figure 11 sero-typed Salmonella Isolates, Jordan, 2014



The most common Salmonella Serogroups tested in Palestine “2014” were Salmonella group C1 (53.8%), followed by Salmonella group C2 (23.1%) and Salmonella group E (21.2%) with an evident increase in group C1 and E and an evident decrease in group C2; figure 9.

Figure 12; Top ten Sero-grouped Salmonella Isolates, Palestine 2014 compared with cumulative 2005-2014



None of the 60 isolates were serotyped from Palestine,

Data for Shigella is available only from Jordan, the total number of isolates was 59, the most common subgroups was Flexnneri (47) followed by Sonnei (11), and only 1 shigella Boydii;

Figure. 13 Distribution of Shigella isolates by month and subgroups, Jordan 2014