

Middle East Consortium on Infectious Diseases  
Surveillance

MECIDS

Regional Technical Report

2013



## Definitions

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

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## Regional Data analysis (2005-2012)

The total number of tested specimens in 2013 at regional level was 77723, yielded 1056 isolates raising the cumulative number of specimens from all three partners for the period 2005 - 2013 to 797616, with total 9911 isolates.

According to the source of specimens Salmonella isolates were divided into human specimens (blood, stool or urine) which yielded 940 isolates and non-human specimens (Food items or water) which yielded 116 isolates.

Table 1; Distribution of tested Specimens and Salmonella isolates by source of specimens, year and MECIDS partners, 2005-2013

Source of Specimens	Country	Description	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Human	Israel	Specimens	70272	69689	42617	39209	33586	36269	34378	33669	30941	390630
		Isolates	776	986	889	929	952	1048	1004	843	877	8304
		Isolationrate/1000	11	14	21	24	28	29	29	25	28	21
	Jordan	Specimens	5000	11599	13174	13102	13759	13304	13339	17396	20189	120862
		Isolates	53	93	90	51	35	58	32	47	40	499
		Isolationrate/1000	11	8	7	4	3	4	2	3	2	4
	Palestine	Specimens	12842	6921	302	343	143	152	136	599	940	22378
		Isolates	80	52	35	15	31	2	3	8	23	249
		Isolationrate/1000	6	8	116	44	217	13	22	13	24	11
	All Human	Specimens	88114	88209	56093	52654	47488	49725	47853	51664	52070	533870
		Isolates	909	1131	1014	995	1018	1108	1039	898	940	9052
Non Human specimens	Israel	Specimens	0	0	0	0	0	0	0	0	0	0
		Isolates	0	0	0	0	0	0	0	0	0	0
		Isolationrate/1000	0	0	0	0	0	0	0	0	0	0
	Jordan	Specimens	9422	22290	24769	30050	33559	25990	20308	21411	19832	187799
		Isolates	0	10	7	13	21	8	18	11	35	88
		Isolationrate/1000	0.0	0.4	0.3	0.4	0.6	0.3	0.9	0.5	1.8	0.5
	Palestine	Specimens	8807	5315	4685	5975	7483	6555	5320	6154	5821	56115
		Isolates	113	77	91	100	106	68	42	58	81	736
		Isolationrate/1000	13	14	19	17	14	10	8	9	19	13
	All Non Human	Specimens	18229	27605	29454	36025	41042	32545	25628	27565	25653	263746
		Isolates	113	87	98	113	127	76	60	69	116	859
All	MECIDS	Total Specimens	106343	115814	85547	88679	88530	82270	73481	79229	77723	797616
		Total Isolates	1022	1218	1112	1108	1145	1184	1099	967	1056	9911
		Isolationrate/1000	10	11	13	12	13	14	15	12	14	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 25 isolates; stool specimens from patients or food handlers yielded 940 isolates.

Non human specimens collected from food items (Jordan), and from food items, water, waste water and swimming pools (Palestine) yielded 116 isolates; there weren't data concerning non human specimens from Israel

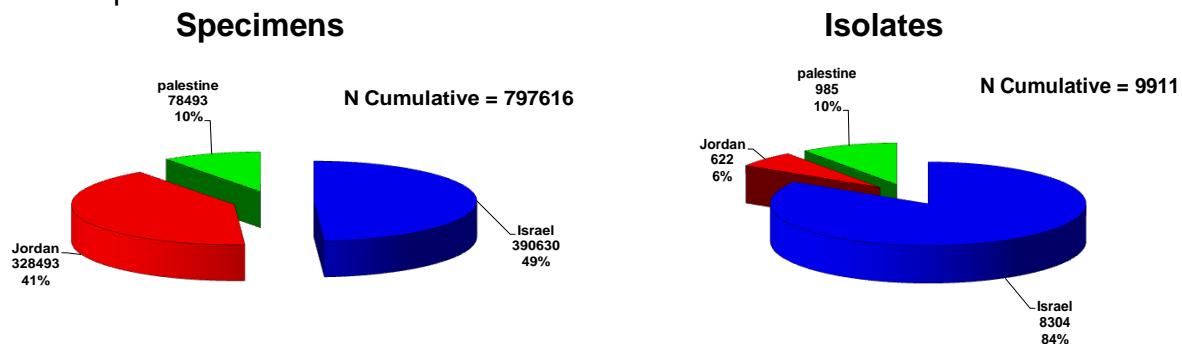
The following table illustrates the distribution of the *Salmonella* isolates by source of specimens, year and by MECIDS partners, table 2.

Table 2; Distribution of *Salmonella* isolates, by MECIDS partners, source of specimens and by year, 2005-2013

years		2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	
Human	Blood specimens	Israel	23	32	19	29	33	13	14	15	25	203
		Jordan	6	2	3	0	1	1	0	4	0	17
		Palestine	0	0	0	0	0	0	0	1	0	1
		Total	29	34	22	29	34	14	14	20	25	221
	Stool specimens*	Israel	753	954	869	900	920	1035	990	828	852	8101
		Jordan	47	92	87	51	34	57	32	43	40	483
		Palestine	80	52	34	15	30	2	3	8	23	247
		Total	880	1098	990	966	984	1094	1025	879	915	8831
Total Human		909	1132	1012	995	1018	1108	1039	899	940	9052	
Non Human specimens	Non Human specimens	Israel	0	0	0	0	0	0	0	0	0	0
		Jordan	0	10	7	13	21	8	18	11	35	123
		Palestine	113	77	91	100	106	68	42	58	81	736
		Total	113	87	98	113	127	76	60	69	116	859

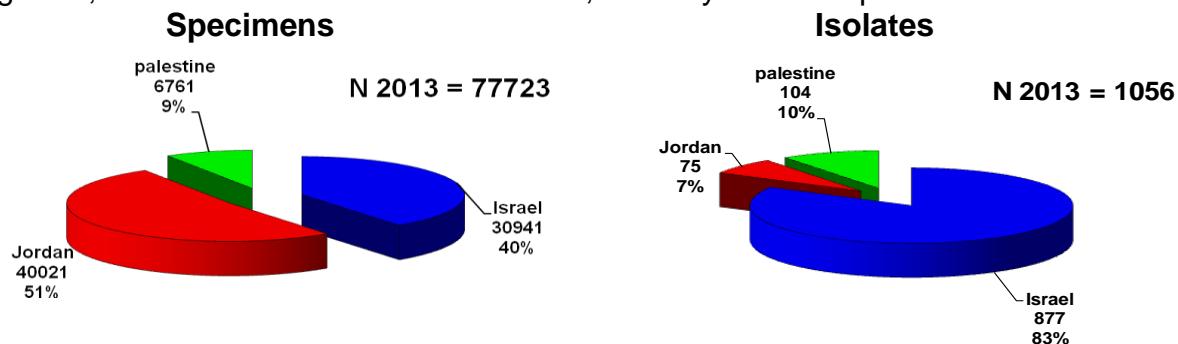
Out of the total 797616 specimens which represents the cumulative number of tested specimens in the period 2005-2013 from MECIDS partners; 390630 (49%) were from Israel yielded 8304 isolates (84%), 328493 (41%) were from Jordan which yielded 622 (6%) isolates and 78493 (10%) from Palestine yielded 985 isolates (10%).

Figure 1; Distribution of *Salmonella* Specimens and *Salmonella* isolates, 2005-2013 by MECIDS partners



In 2013, 83% of isolates were from Israel, 10% of isolates were from Palestine and 7% of isolates were from Jordan figure 2.

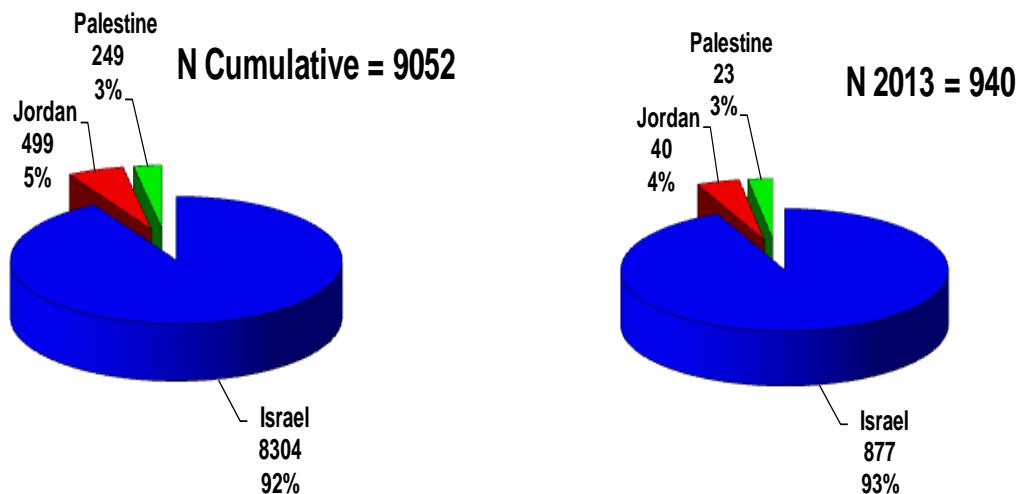
Figure 2; Distribution of *Salmonella* isolates, 2013 by MECIDS partners



The cumulative number of specimens from human source for the period 2005-2013 from MECIDS project partners was 533870 specimens, yielded 9052 isolates; almost 92% of the yielded isolates were from Israel, 5% from Jordan and 3% from Palestine.

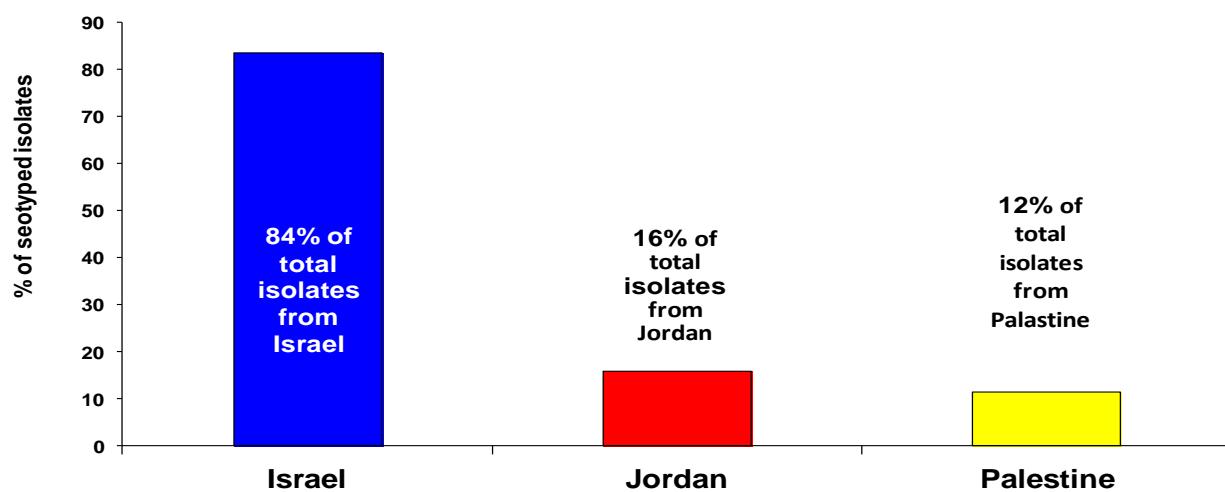
In 2013 the number of specimens was 52070 specimens, yielded 940 isolates; almost 93% of the yielded isolates were from Israel, 4% from Jordan and 3% from Palestine figure 3.

Figure 3; Distribution of Salmonella isolates from human specimens, 2005-2013 and 2013 by MECIDS partners



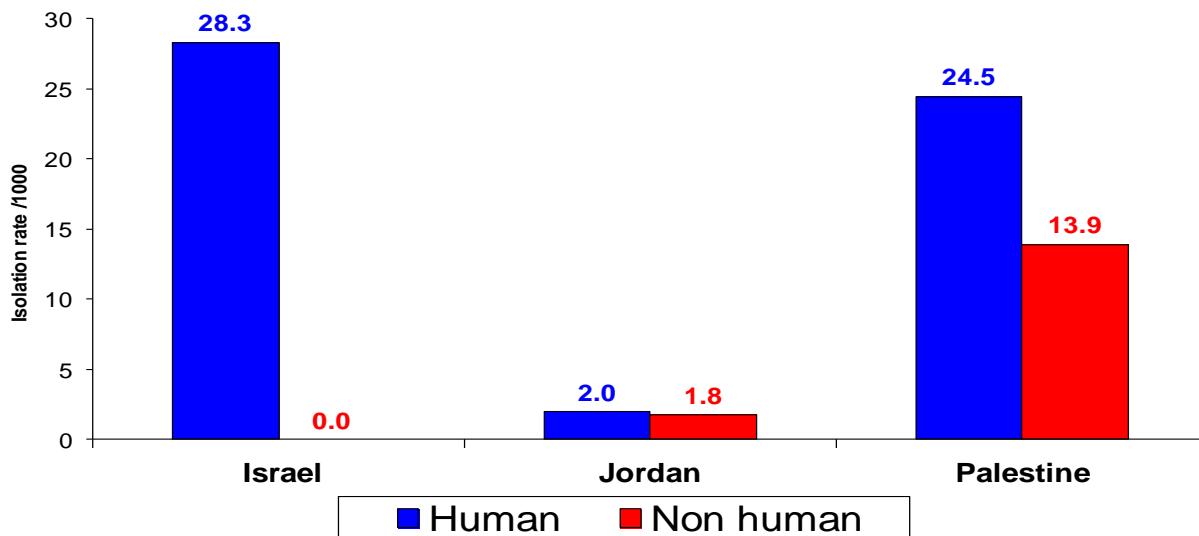
In 2013 Serotypes were identified 84%, 16% and 12% of Salmonella isolates from Israel, Jordan and Palestine respectively; figure 4.

Figure 4; Distribution of identified Serotypes from Salmonella isolates, 2013 by MECIDS partners



In 2013 the isolation rate for human specimens was 28.3, 2.0 and 24.5/1000 for Israel, Jordan and Palestine respectively, but for the non human specimens for Jordan was 1.8/1000 and for Palestine 13.9 /1000; there aren't non human specimens from Israel; figure 5.

Figure 5; Salmonella isolation Rate/1000, from both human and non human Specimens 2005-2013 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, 2005-2013

Salmonella Serogroups	Israel								Jordan								palestine								Cumulative							
	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Cum_Israel	Cum_Jordan	Cum_Palestine	Grand total	
Salmonella A	3	9	6	3	20	2	1	4	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	50	2	0	52	
Salmonella B	144	141	89	110	82	90	100	82	59	11	32	10	18	16	24	14	20	36	4	20	22	14	26	9	3	4	21	897	181	123	1201	
Salmonella C	0	23	13	28	6	29	28	11	36	0	0	0	0	0	0	0	0	0	0	4	21	1	0	0	0	0	0	174	0	26	200	
Salmonella C1	185	301	254	265	394	434	425	411	172	4	7	5	8	10	4	4	0	7	4	40	24	16	27	36	21	39	31	2841	49	238	3128	
Salmonella C2	107	187	138	145	114	111	94	79	50	9	25	7	12	3	10	6	8	7	2	39	31	26	23	2	10	6	5	1025	87	144	1256	
Salmonella C-C3	5	1	2	4	3	7	5	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	0	35
Salmonella C3	12	6	6	1	1	0	1	1	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	19	20	45	9	23	18	9	13	11	5	5	5	2	1	2	0	0	0	1580	167	20	1767	
Salmonella D1	0	0	1	4	3	5	1	4	2	0	0	0	0	0	0	0	0	1	0	0	2	2	1	2	3	20	0	13	33			
Salmonella E	13	20	24	35	14	23	18	19	4	4	12	17	9	3	1	3	11	8	0	3	16	20	4	0	3	2	15	170	68	63	301	
Salmonella E1	0	1	0	1	6	6	1	4	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	20	1	0	21	
Salmonella F	1	1	0	1	4	8	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	15	2	0	17
Salmonella G	3	9	2	12	10	18	102	18	16	0	1	2	1	1	3	1	0	0	0	1	0	0	0	0	0	0	0	190	9	1	200	
Salmonella H	0	1	2	0	0	2	0	0	0	0	0	2	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	5	0	0	10	
Salmonella I	22	3	13	12	20	13	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	0	0	97	
Salmonella K	1	1	0	0	0	0	3	2	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	3	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	1	0	0	1	
Salmonella M	3	5	5	0	2	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	16	2	0	18	
Salmonella N	0	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	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	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	
Salmonella P	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	
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	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	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	8	0	0	8	
Salmonella spp.	34	22	158	131	29	68	64	93	471	6	6	8	4	0	2	10	5	4	0	0	1	1	1	4	2	0	1070	45	9	1124		
Salmonella T	0	0	0	1	1	3	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	
Salmonella X	1	0	0	2	1	5	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	17	
Salmonella Y	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
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	1	0	0	1	
Total No. specimens	70272	69689	42617	39209	33586	36269	34378	33669	30941	14422	33889	37943	43152	47318	39294	33647	38807	40021	21649	12236	4987	6318	7626	6707	5456	6753	6761	390630	328493	78493	797616	
Total No. Isolates	776	986	889	929	952	1048	1004	843	877	53	103	97	64	56	66	50	58	75	193	129	126	115	137	70	45	66	104	8304	622	985	9911	
Total No. serogrouped isolates	776	986	889	929	952	1048	1004	843	351	53	103	97	64	56	66	50	58	40096	24	112	119	82	84	52	40	54	75	7778	622	642	9042	
Isolation Rate/1000	11.0	14.1	20.9	23.7	28.3	28.9	29.2	25.0	28.34	10.6	8.5	7.1	4.3	3.2	4.7	3.3	3.2	3.7	19.1	22.0	135.3	60.5	230.9	23.5	30.0	22.8	38.4	21	5	24	12	

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 2005-2013

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 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Cum_Israel	Cum_Jordan	Cum_Palestine	Grand total
Salmonella A	3	9	6	3	20	2	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	50
Salmonella B	144	141	89	110	82	90	100	82	59	11	30	9	11	9	22	9	14	19	1	2	4	0	3	0	0	1	17	897	134	28	1059
Salmonella C	0	23	13	28	6	29	28	11	36	0	0	0	0	0	0	0	0	0	0	4	21	0	0	0	0	0	0	174	0	25	199
Salmonella C1	185	301	254	265	394	434	425	411	172	4	6	5	6	7	3	1	0	3	0	35	4	0	0	2	1	3	2	2841	35	47	2923
Salmonella C2	107	187	138	145	114	111	94	79	50	9	24	7	11	3	10	5	7	6	0	4	0	1	2	0	0	0	0	1025	82	7	1114
Salmonella C2-C3	5	1	2	4	3	7	5	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	0	35
Salmonella C3	12	6	6	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	28	0	2	30
Salmonella D	240	250	172	168	237	219	154	83	57	19	15	39	9	14	16	7	13	6	0	2	4	0	0	0	0	0	0	1580	138	6	1724
Salmonella D1	0	0	1	4	3	5	1	4	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3	20	0	5	25
Salmonella E	13	20	24	35	14	23	18	19	4	4	11	17	8	2	1	2	9	3	0	0	2	2	0	0	1	0	1	170	57	6	233
Salmonella E1	0	1	0	1	6	6	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	20
Salmonella F	1	1	0	1	4	8	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1	0	16
Salmonella G	3	9	2	12	10	18	102	18	16	0	1	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	190	4	1	195
Salmonella H	0	1	2	0	0	2	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5	4	0	9
Salmonella I	22	3	13	12	20	13	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	0	0	97
Salmonella K	1	1	0	0	0	0	3	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2	0	10
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	1	0	0	1
Salmonella M	3	5	5	0	2	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	16	2	0	18
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	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	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
Salmonella P	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
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	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	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	8	0	0	8
Salmonella spp.	34	22	158	131	29	68	64	93	471	6	6	8	3	0	2	7	4	3	0	0	0	1	1	0	0	2	0	1070	39	4	1113
Salmonella T	0	0	0	1	1	3	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9
Salmonella X	1	0	0	2	1	5	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	17
Salmonella Y	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
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	1	0	0	1
Total No. specimens	70272	69689	42617	39209	33586	36269	34378	33669	30941	5000	11599	13174	13102	13759	13304	13339	17396	20189	12842	6921	302	343	143	152	136	599	940	390630	120862	22378	533870
Total No. isolates	776	986	889	929	952	1048	1004	843	877	53	93	90	51	35	58	32	47	40	80	52	35	15	31	2	3	8	23	8304	499	249	9052
Total No. serogrouped isolates	776	986	889	929	952	1048	1004	843	351	53	93	90	51	35	58	32	47	40	4	48	35	4	6	2	3	6	23	7778	499	131	8408
Isolation Rate/1000	11.0	14.1	20.9	23.7	28.3	28.9	29.2	25.0	28.3	10.6	8.0	6.8	3.9	2.5	4.4	2.4	2.7	2.0	6.2	7.5	115.9	43.7	216.8	13.2	22.1	13.4	24.5	21	4	11	17

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

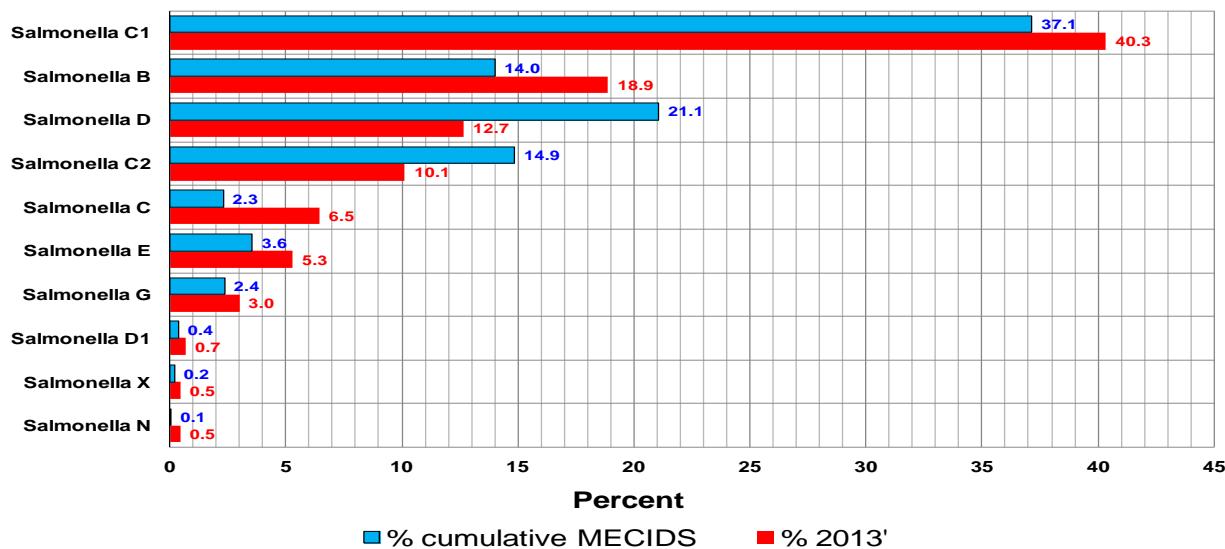
Table 5; Total non human Salmonella isolates from MECIDS partners by Serogroups and year of isolation, 2005-2012

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 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2005	Total 2006	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	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	2	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	2	1	7	7	2	5	6	17	3	18	18	14	23	9	3	3	4	0	47	95	142		
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	0	1	1	
Salmonella C1	0	0	0	0	0	0	0	0	0	0	1	0	2	3	1	3	0	4	4	5	20	16	27	34	20	36	29	0	14	191	205	
Salmonella C2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	1	2	35	31	25	21	2	10	6	5	0	5	137	142	
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
Salmonella C3	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	6	6
Salmonella D	0	0	0	0	0	0	0	0	0	0	5	6	0	9	2	2	0	5	5	3	1	2	1	2	0	0	0	0	0	29	14	43
Salmonella D1	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	1	0	1	1	0	1	2	5	0	3	14	18	4	0	2	2	14	0	11	57	68	
Salmonella E1	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 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	1	0
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	5	0
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	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
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	1	0
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
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
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
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
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
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
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
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
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
Salmonella spp.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	1	1	0	0	0	0	0	1	4	0	0	0	6	5	11
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
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
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
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
Total No. specimens	0	0	0	0	0	0	0	0	0	9422	22290	24769	30050	33559	25990	20308	21411	19832	8807	5315	4685	5975	7483	6555	5320	6154	5821	0	207631	56115	263746	
Total No. Isolates	0	0	0	0	0	0	0	0	0	10	7	13	21	8	18	11	35	113	77	91	100	106	68	42	58	81	0	123	736	859		
Total No. serogrouped isolates	0	0	0	0	0	0	0	0	0	10	7	13	21	8	18	11	35	20	64	84	78	50	37	48	52	0	123	511	634			
Isolation Rate/1000	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	12.8	14.5	19.4	16.7	14.2	10.4	7.9	9.4	13.9	0	1	13	3		

The most common Salmonella Serogroups identified at the regional level in 2013 were Salmonella group C1 (40.3%), Salmonella group B (18.9%), Salmonella group D (12.7%), and Salmonella group C2 (10.1%)

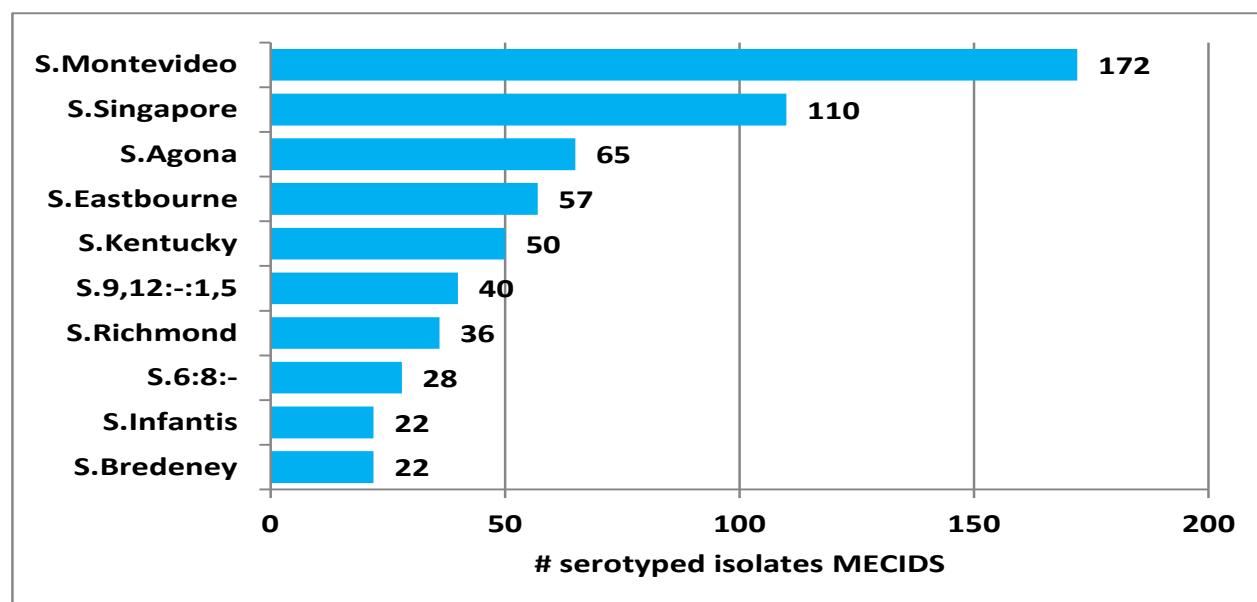
Compared with the dominant pattern in 2005-2013 there is an evident decrease in group D and increase in group B, which become the second dominant, also there is increase in a small proportion in group C, E, and G figure 6.

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



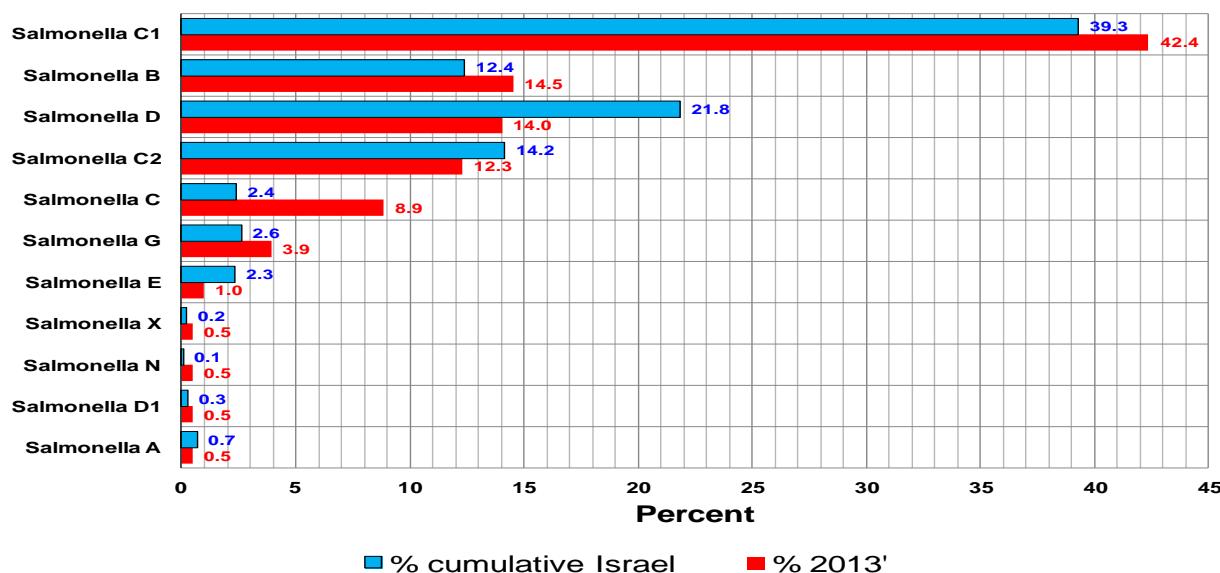
The most common Salmonella Serotype in 2013 at the regional level were S. Montevideo, S. Singapore and S. Agona Figure 7

Figure 7. Top ten sero-typed Salmonella Isolates, MECIDS, 2013



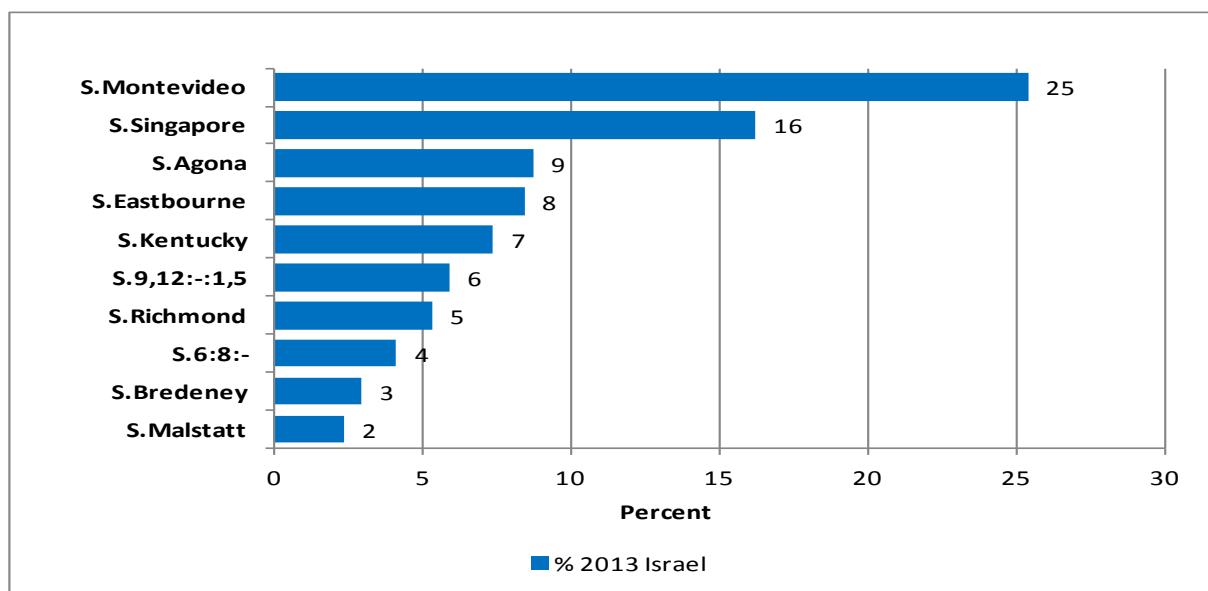
The most common Salmonella Serogroups tested in Israel (2013) were Salmonella group C1 (42.4%), Salmonella group B (14.5%); followed by Salmonella group D (14.0%); with an evident increase in group C and decrease in group B figure 7.

Figure 8; Top ten Sero-grouped Salmonella Isolates, Israel 2013 compared with cumulative 2005-2013



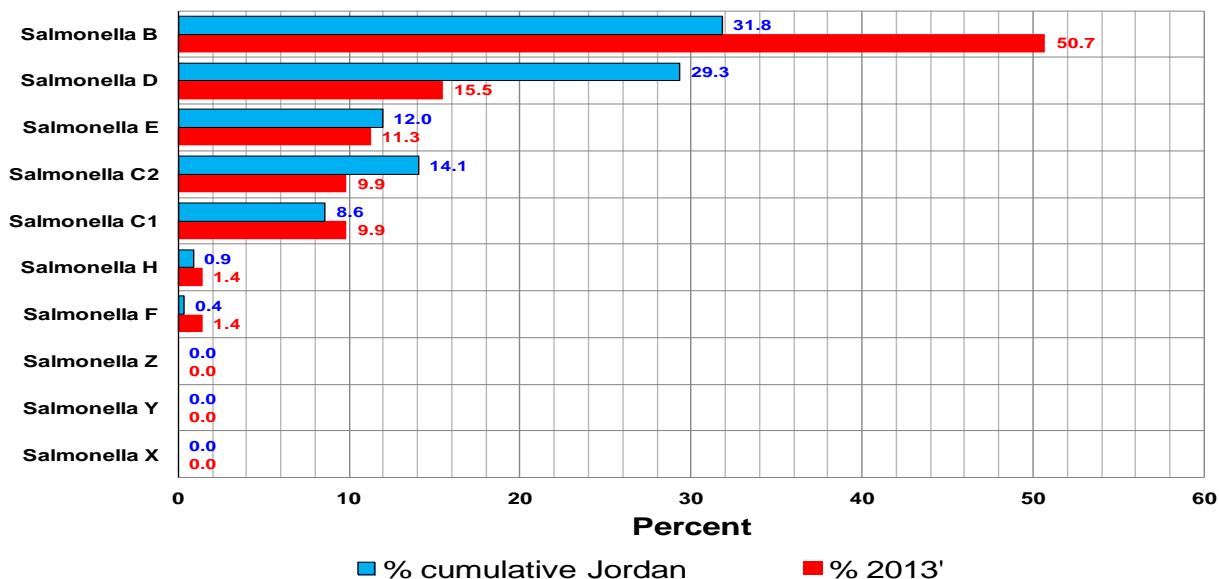
As the isolates are mostly from Israel, the pattern of Salmonella Serotype in 2013 in Israel is predominate for MECIDS, these are S. Montevideo, S. Singapore and S. Agona

Figure 9 Top ten sero-typed Salmonella Isolates, Israel, 2013



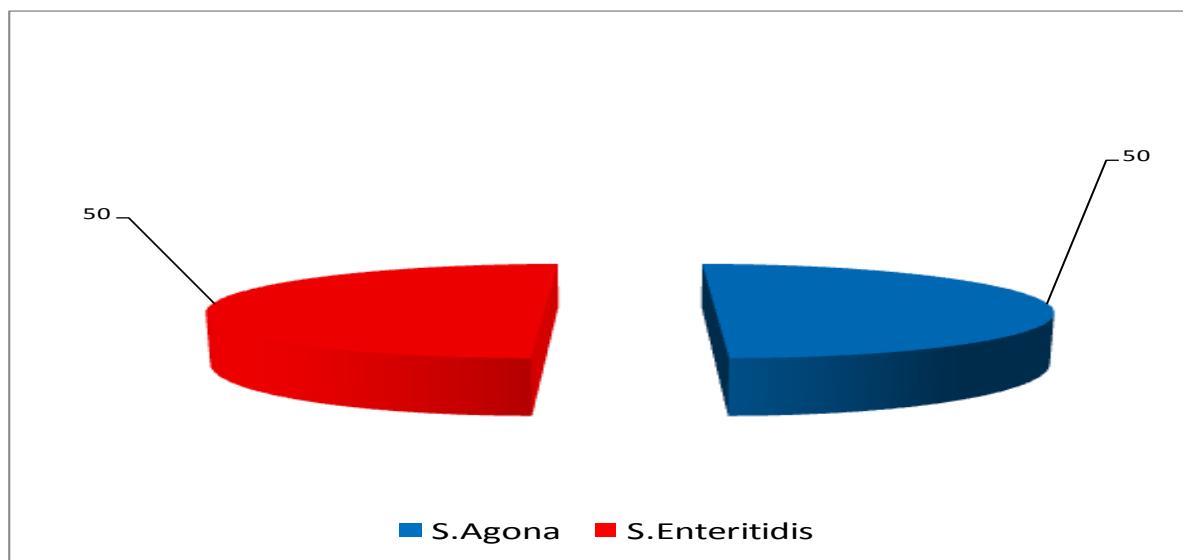
The most common Salmonella Serogroups tested in Jordan in 2013 were Salmonella group B (50.7%) followed by Salmonella group D (16.5%) and Salmonella E (11.3%); there is an evident increase in Group B and an evident decrease in group D figure 8.

Figure 10; Top ten Sero-grouped Salmonella Isolates, Jordan 2013 compared with cumulative 2005-2012



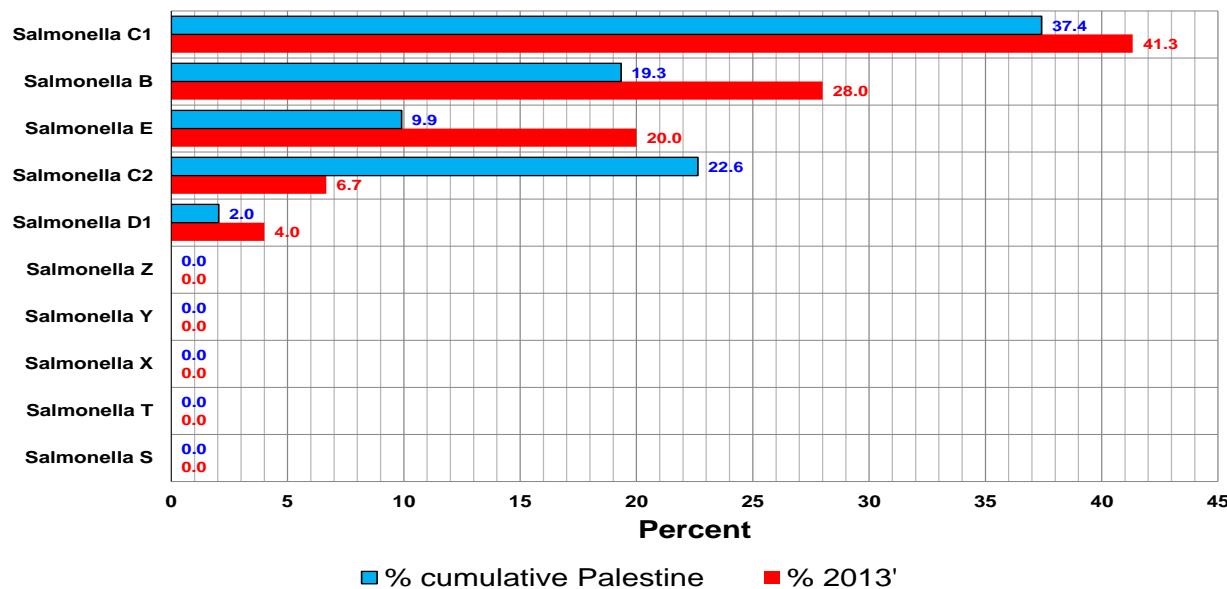
Isolates were serotyped for the most prevalent serotypes identified by the collaboration between MECIDS partners, in 2013 two serotypes were identified from 12 isolates 50% were S. enteritidis and 50% were S. Agona

Figure 11 Top ten sero-typed Salmonella Isolates, Jordan



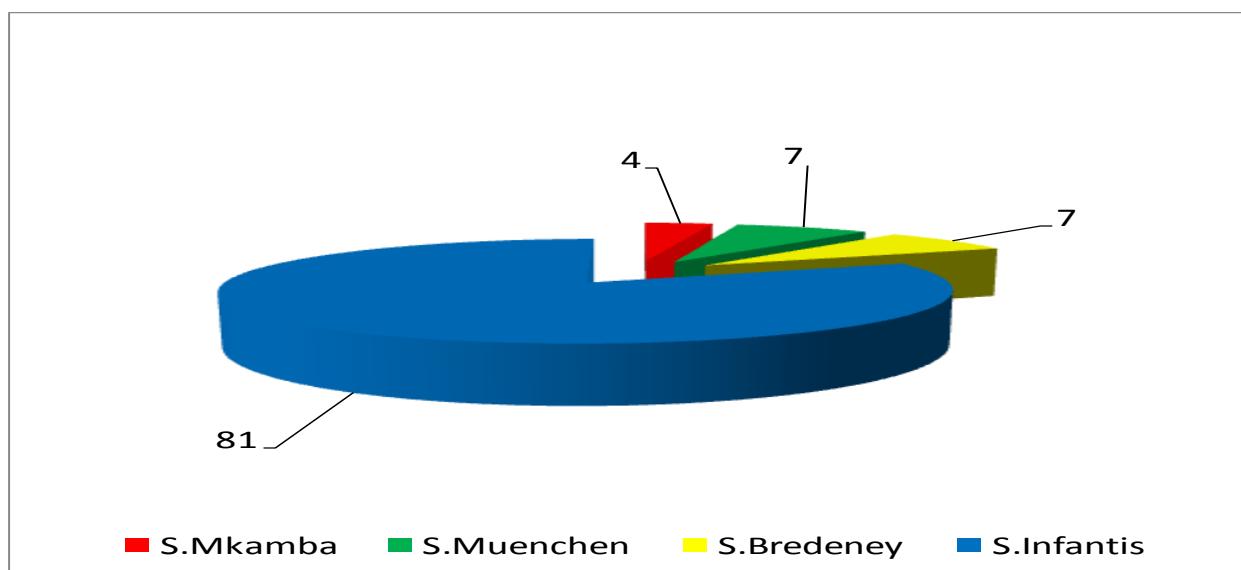
The most common Salmonella Serogroups tested in Palestine “2013” were Salmonella group C1 (41.3%), followed by Salmonella group B (28%), Salmonella group E (20%) and Salmonella group C2 (6.7%) with an evident increase in group B, E and an evident decrease in group C2; figure 9.

Figure 12; Top ten Sero-grouped Salmonella Isolates, Palestine 2013 compared with cumulative 2005-2012



27 isolates were serotyped from Palestine, 81% were S. Infantis and 7% were S. Muenchen and S. Bredeney and 4% were S. Mkamba

Figure 13; Sero-grouped Salmonella Isolates, Palestine 2013



Data for Shigella was available only from Jordan, the total number of isolates was 21, the most common subgroups was Flexnneri (15) followed by Sonnei (6), there wasn't any shigella Boydii;

Figure. 14 Distribution of Shigella isolates by month and subgroups, Jordan 2013

