Table 10A. MDR *Salmonella* from Chickens, 1997-2010

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Isolates Tested	214	561	1438	1173	1307	1500	1158	1280	1989	1380	994	624	551	564
Resistance Pattern														
No Resistance Detected (Pan-susceptible)	52.8% 113	58.6% 329	58.8% 846	56.9% 668	66.6% 871	62.0% 930	61.1% 708	62.7% 803	61.2% 1217	57.2% 790	53.9% 536	60.4% 377	56.1% 309	49.3% 278
Resistance ≥1 CLSI Class[1]	47.2% 101	41.4% 232	41.2% 592	43.1% 505	33.4% 436	38.0% 570	39.2% 454	37.3% 477	38.8% 772	42.8% 590	46.1% 458	39.6% 247	43.9% 242	50.7% 286
Resistance ≥ 2 CLSI Classes[1]	28.0% 60	30.7% 172	31.9% 459	32.2% 378	25.2% 330	28.3% 424	27.2% 315	31.2% 399	31.3% 622	31.4% 434	30.2% 300	33.3% 208	35.8% 197	41.7% 235
Resistance ≥ 3 CLSI Classes[1]	9.8% 21	13.4% 75	12.3% 177	15.1% 177	10.2% 133	14.2% 213	13.5% 156	15.8% 202	15.1% 301	16.4% 226	17.8% 177	11.4% 71	15.6% 86	15.2% 86
Resistance ≥ 4 CLSI Classes[1]	3.3% 7	3.9% 22	4.9% 71	6.7% 79	3.6% 47	7.7% 115	6.8% 79	9.8% 126	8.7% 174	10.3% 142	12.3% 122	7.5% 47	11.1% 61	11.3% 64
Resistance ≥ 5 CLSI Classes[1]	1.4% 3	2.7% 15	3.0% 43	5.5% 64	3.1% 41	5.7% 85	4.9% 57	8.0% 103	5.9% 117	6.6% 91	7.4% 74	6.1% 38	7.8% 43	9.0% 51
At Least ACSSuT[2]	1.4% 3	2.7% 15	1.7% 24	4.3% 50	2.4% 32	1.9% 29	1.5% 17	0.9% 12	1.6% 31	1.6% 22	1.5% 15	1.4% 9	1.3% 7	2.3% 13
At Least ACT/S[3]	0.0% 0	0.2% 1	0.1% 2	0.0% 0	0.1% 1	0.0% 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
At Least ACSSuTAuCx[4]	0.0% 0	0.5% 3	0.3% 4	2.7% 32	1.1% 14	0.9% 13	1.0% 12	0.4% 5	0.9% 18	1.1% 15	1.4% 14	1.1% 7	1.3% 7	2.0% 11
At Least Ceftriaxone and Nalidixic Acid Resistant	0.0% 0	0.0% 0	0.1% 1	0.1% 1	0.0% 0	0.5% 8	0.0% 0	0.2% 2	0.1% 1	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0

Table 11A. MDR *Salmonella* from Turkeys, 1997-2010

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Isolates Tested	107	240	713	518	550	244	262	236	227	304	271	148	121	151
Resistance Pattern														
No Resistance Detected (Pan-susceptible)	32.7% 35	41.3% 99	32.5% 232	33.4% 173	31.6% 174	29.9% 73	24.0% 63	33.5% 79	27.8% 63	28.0% 85	15.5% 42	21.6% 32	19.8% 24	25.2% 38
Resistance ≥1 CLSI Class[1]	67.3% 72	58.8% 141	67.5% 481	66.6% 345	68.4% 376	70.1% 171	76.0% 199	66.5% 157	72.2% 164	71.4% 219	84.5% 229	78.4% 116	80.2% 97	74.8% 113
Resistance ≥ 2 CLSI Classes[1]	48.6% 52	45.0% 108	53.3% 380	51.0% 264	56.2% 309	46.3% 113	42.7% 112	50.0% 118	53.3% 121	37.5% 141	60.1% 163	55.4% 82	67.8% 82	59.6% 90
Resistance ≥ 3 CLSI Classes[1]	25.2% 27	23.8% 57	26.2% 187	21.6% 112	30.4% 167	24.2% 59	21.8% 57	27.1% 64	28.2% 64	27.3% 83	33.6% 91	29.7% 44	33.1% 40	37.1% 56
Resistance ≥ 4 CLSI Classes[1]	5.6% 6	6.3% 15	10.8% 77	10.0% 52	14.7% 81	11.1% 27	9.5% 25	10.2% 24	11.5% 26	12.2% 37	15.1% 41	10.1% 15	11.6% 14	17.9% 27
Resistance ≥ 5 CLSI Classes[1]	4.7% 5	0.8% 2	5.0% 36	4.8% 25	6.0% 33	6.6% 16	3.1% 8	5.5% 13	6.2% 14	5.9% 18	7.0% 19	4.1% 6	9.1% 11	9.3% 14
At Least ACSSuT[2]	3.7% 4	0.8% 2	3.8% 27	3.3% 17	3.6% 20	4.5% 11	2.3% 6	4.7% 11	4.0% 9	3.9% 12	4.8% 13	2.0% 3	3.3% 4	4.0% 6
At Least ACT/S[3]	0.0% 0	0.4% 1	0.4% 3	0.8% 4	0.7% 4	0.8% 2	0.0% 0	0.4% 1	0.0% 0	0.3% 1	0.0% 0	0.0% 0	0.8% 1	0.0% 0
At Least ACSSuTAuCx[4]	3.7% 4	0.4% 1	3.4% 24	1.9% 10	2.9% 16	1.6% 4	0.8% 2	2.1% 5	1.8% 4	2.3% 7	4.1% 11	2.0% 3	3.3% 4	1.3% 2
At Least Ceftriaxone and Nalidixic Acid Resistant	1.9% 2	0.0% 0	2.7% 19	1.2% 6	1.5% 8	1.2% 3	0.4% 1	0.8% 2	0.9% 2	0.3% 1	0.7% 2	0.0% 0	0.0% 0	0.7% 1

[1]CLSI: Clinical and Laboratory Standards Institute M100 Document

[2]ACSSuT: resistance to at least ampicillin, chloramphenicol, streptomycin, sulfamethoxazole/sulfisoxazole, and tetracycline

[3]ACT/S: resistance to at least ampicillin, chloramphenicol, and trimethoprim-sulfamethoxazole

[4]ACSSuTAuCx: resistance to at least ACSSuT, amoxicillin-clavulanic acid, and ceftriaxone

Table 12A. MDR *Salmonella* from Cattle, 1997-2010

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Isolates Tested	24	284	1610	1388	893	1008	670	607	329	389	439	443	200	247
Resistance Pattern														
No Resistance Detected (Pan-susceptible)	66.7% 16	73.2% 208	74.5% 1200	70.0% 972	69.9% 624	64.3% 648	61.0% 409	65.6% 398	63.2% 208	67.6% 263	72.0% 316	68.8% 305	68.5% 137	61.1% 151
Resistance ≥1 CLSI Class[1]	33.3% 8	26.8% 76	25.5% 410	30.0% 416	30.1% 269	35.7% 360	39.0% 261	34.4% 209	36.8% 121	32.4% 126	28.0% 123	31.2% 138	31.5% 63	38.9% 96
Resistance ≥ 2 CLSI Classes[1]	20.8% 5	17.3% 49	15.8% 254	21.8% 303	21.6% 193	27.9% 281	31.8% 213	23.9% 145	28.6% 94	26.0% 101	22.8% 101	25.7% 114	26.5% 53	32.4% 80
Resistance ≥ 3 CLSI Classes[1]	12.5% 3	13.7% 39	13.3% 214	19.8% 275	18.9% 169	24.5% 247	29.6% 198	21.1% 128	27.7% 91	23.9% 93	22.1% 97	23.5% 104	26.0% 52	28.7% 71
Resistance ≥ 4 CLSI Classes[1]	8.3% 2	9.2% 26	10.9% 175	17.4% 242	16.9% 151	22.1% 223	27.5% 184	18.8% 114	24.9% 82	22.1% 86	21.0% 92	21.9% 97	24.5% 49	25.5% 63
Resistance ≥ 5 CLSI Classes[1]	8.3% 2	4.6% 13	8.0% 128	14.0% 195	15.1% 135	19.3% 195	23.6% 158	17.8% 108	23.1% 76	20.1% 78	18.9% 83	19.0% 84	20.0% 40	23.1% 57
At Least ACSSuT[2]	4.2% 1	4.2% 12	7.6% 123	13.1% 182	14.6% 130	17.1% 172	18.1% 121	16.3% 99	20.4% 67	18.3% 71	16.2% 71	18.1% 80	15.0% 30	18.6% 46
At Least ACT/S[3]	0.0% 0	2.1% 6	2.2% 35	1.7% 23	2.4% 21	2.4% 24	2.7% 18	1.2% 7	4.3% 14	4.1% 16	2.5% 11	0.0% 0	1.5% 3	4.5% 11
At Least ACSSuTAuCx[4]	0.0% 0	2.1% 6	3.7% 59	8.9% 124	11.0% 98	14.6% 147	15.1% 101	12.0% 73	17.3% 57	16.2% 63	13.9% 61	14.7% 65	9.5% 19	16.2% 40
At Least Ceftriaxone and Nalidixic Acid Resistant	0.0% 0	0.0% 0	0.1% 1	0.1% 1	0.3% 3	0.2% 2	0.4% 3	1.0% 6	0.9% 3	0.3% 1	0.2% 1	0.7% 3	0.0% 0	1.2% 3

Table 13A. MDR *Salmonella* from Swine, 1997-2010

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Isolates Tested	111	793	876	451	418	379	211	308	301	304	211	111	120	111
Resistance Pattern														
No Resistance Detected (Pan-susceptible)	44.1% 49	49.2% 390	48.9% 428	43.2% 195	43.5% 182	40.1% 152	53.6% 113	37.3% 115	44.5% 134	34.5% 105	43.1% 91	47.7% 53	44.2% 53	44.1% 49
Resistance ≥1 CLSI Class[1]	55.9% 62	50.8% 403	51.1% 448	56.8% 256	56.5% 236	59.9% 227	46.4% 98	62.7% 193	55.5% 167	65.5% 199	56.9% 120	52.3% 58	55.8% 67	55.9% 62
Resistance ≥2 CLSI Classes[1]	43.2% 48	34.4% 273	35.3% 309	44.6% 201	40.2% 168	43.3% 164	34.1% 72	41.2% 127	40.5% 122	36.2% 110	38.4% 81	36.9% 41	35.8% 43	39.6% 44
Resistance ≥3 CLSI Classes[1]	26.1% 29	24.0% 190	26.4% 231	34.6% 156	30.6% 128	34.0% 129	23.7% 50	33.4% 103	31.9% 96	22.7% 69	28.0% 59	29.7% 33	31.7% 38	27.9% 31
Resistance ≥4 CLSI Classes[1]	15.3% 17	11.2% 89	9.8% 86	17.1% 77	9.1% 38	12.7% 48	10.9% 23	15.3% 47	13.3% 40	9.5% 29	17.5% 37	14.4% 16	15.0% 18	11.7% 13
Resistance ≥5 CLSI Classes[1]	4.5% 5	8.1% 64	7.3% 64	9.3% 42	7.2% 30	9.0% 34	9.5% 20	12.3% 38	10.3% 31	5.9% 18	11.4% 24	8.1% 9	14.2% 17	7.2% 8
At Least ACSSuT[2]	4.5% 5	7.8% 62	7.1% 62	8.6% 39	7.2% 30	7.7% 29	7.6% 16	12.0% 37	9.6% 29	5.3% 16	10.9% 23	8.1% 9	13.3% 16	7.2% 8
At Least ACT/S[3]	0.0% 0	0.5% 4	0.5% 4	0.0% 0	1.0% 4	0.5% 2	0.9% 2	0.6% 2	1.7% 5	0.3% 1	1.9% 4	0.0% 0	1.7% 2	0.0% 0
At Least ACSSuTAuCx[4]	0.0% 0	0.1% 1	0.5% 4	1.3% 6	2.2% 9	1.8% 7	1.9% 4	1.0% 3	2.7% 8	0.7% 2	0.5% 1	0.9% 1	1.7% 2	0.9% 1
At Least Ceftriaxone and Nalidixic Acid Resistant	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.0% 0	0.3% 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]CLSI: Clinical and Laboratory Standards Institute M100 Document

[2]ACSSuT: resistance to at least ampicillin, chloramphenicol, streptomycin, sulfamethoxazole/sulfisoxazole, and tetracycline

[3]ACT/S: resistance to at least ampicillin, chloramphenicol, and trimethoprim-sulfamethoxazole

[4]ACSSuTAuCx: resistance to at least ACSSuT, amoxicillin-clavulanic acid, and ceftriaxone