Table S1: Frequency of the *C. jejuni* STs with their CC designation isolated from different sources 'before intervention'.

		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
474	48	184	6	29	2	1	2	0	224
45	45	58	4	36	15	27	4	11	155
50	21	35	34	5	17	13	1	0	105
48	48	51	0	1	25	8	0	0	85
53	21	37	24	9	3	2	0	0	75
190	21	32	14	9	0	0	0	0	55
42	42	22	26	4	0	0	1	0	53
61	61	22	21	0	0	0	1	0	44
2026	403	14	22	0	0	0	0	0	36
257	257	17	0	9	3	2	0	0	31
354	354	26	0	3	0	1	0	0	30
451	21	9	0	0	0	21	0	0	30
422	21	5	21	0	0	0	3	0	29
520	21	11	7	5	0	4	0	0	27
52	52	18	0	7	0	1	0	0	26
583	45	10	1	8	0	4	0	1	24
1517	354	11	6	0	6	0	0	0	23
38	48	18	1	0	0	0	0	0	19
2345	206	6	0	1	11	0	0	0	18
2381	U/A	0	0	0	0	0	16	0	16
3609	48	0	0	0	15	0	0	0	15
21	21	6	5	0	1	0	0	0	12
436	U/A	4	5	0	0	0	1	0	10
677	677	7	1	0	1	0	1	0	10
25	45	4	0	2	0	2	1	0	9
1225	1275	0	0	0	0	0	7	0	7
3676	42	5	1	0	0	0	1	0	7

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		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
3711	257	2	2	0	0	1	0	0	5
3717	21	1	0	0	0	3	0	0	4
137	45	1	0	0	0	0	1	1	3
658	658	2	0	0	0	1	0	0	3
1457	U/A	3	0	0	0	0	0	0	3
2350	48	2	1	0	0	0	0	0	3
2392	52	2	1	0	0	0	0	0	3
3538	U/A	2	0	0	0	0	1	0	3
3662	1275	0	0	0	0	0	3	0	3
3797	61	0	3	0	0	0	0	0	3
3799	61	0	3	0	0	0	0	0	3
177	177	0	0	0	0	0	2	0	2
459	42	2	0	0	0	0	0	0	2
696	1332	2	0	0	0	0	0	0	2
2354	U/A	0	0	0	0	0	1	1	2
2391	1034	1	0	1	0	0	0	0	2
2536	U/A	0	0	0	0	0	0	2	2
3610	21	0	1	0	0	0	1	0	2
3655	U/A	0	0	0	0	0	2	0	2
3659	692	0	0	0	0	0	2	0	2
3663	U/A	0	0	0	0	0	2	0	2
3712	362	2	0	0	0	0	0	0	2
3715	21	2	0	0	0	0	0	0	2
3719	48	0	1	0	1	0	0	0	2
3721	354	0	0	2	0	0	0	0	2
3726	U/A	0	0	2	0	0	0	0	2
5	353	1	0	0	0	0	0	0	1
51	443	1	0	0	0	0	0	0	1
219	61	1	0	0	0	0	0	0	1
227	206	0	0	1	0	0	0	0	1

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		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
233	45	0	0	0	0	1	0	0	1
393	443	0	1	0	0	0	0	0	1
403	403	1	0	0	0	0	0	0	1
526	U/A	0	0	0	0	0	1	0	1
578	61	1	0	0	0	0	0	0	1
618	61	0	1	0	0	0	0	0	1
681	682	0	0	0	0	0	0	1	1
694	1034	0	0	0	0	0	1	0	1
996	U/A	0	0	0	0	0	1	0	1
1030	U/A	0	0	0	0	0	1	0	1
1223	1275	0	0	0	0	0	1	0	1
1324	U/A	0	0	0	0	0	0	1	1
1707	607	1	0	0	0	0	0	0	1
1818	45	0	0	0	1	0	0	0	1
1911	U/A	0	0	0	1	0	0	0	1
2140	574	1	0	0	0	0	0	0	1
2219	45	1	0	0	0	0	0	0	1
2341	61	0	1	0	0	0	0	0	1
2343	48	1	0	0	0	0	0	0	1
2347	U/A	0	0	0	0	0	1	0	1
2537	177	0	0	0	0	0	0	1	1
2538	U/A	0	0	0	0	0	0	1	1
2539	177	0	0	0	0	0	0	1	1
2584	692	0	0	0	0	0	1	0	1
2619	U/A	0	0	0	0	0	1	0	1
3093	21	0	0	0	0	1	0	0	1
3640	U/A	0	0	0	0	0	1	0	1
3656	U/A	0	0	0	0	0	1	0	1
3657	1275	0	0	0	0	0	1	0	1
3658	U/A	0	0	0	0	0	1	0	1

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		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
3660	U/A	0	0	0	0	0	1	0	1
3661	1275	0	0	0	0	0	1	0	1
3664	692	0	0	0	0	0	1	0	1
3672	U/A	0	0	0	0	0	1	0	1
3673	U/A	0	0	0	0	0	1	0	1
3674	1275	0	0	0	0	0	1	0	1
3675	U/A	0	0	0	0	0	1	0	1
3713	21	1	0	0	0	0	0	0	1
3714	21	0	1	0	0	0	0	0	1
3718	48	1	0	0	0	0	0	0	1
3720	49	1	0	0	0	0	0	0	1
3722	U/A	0	1	0	0	0	0	0	1
3725	692	0	0	0	1	0	0	0	1
3727	45	1	0	0	0	0	0	0	1
3728	U/A	1	0	0	0	0	0	0	1
3784	354	1	0	0	0	0	0	0	1
3792	257	1	0	0	0	0	0	0	1
3794	21	0	1	0	0	0	0	0	1
3795	403	0	1	0	0	0	0	0	1
3796	U/A	0	1	0	0	0	0	0	1
3798	403	0	1	0	0	0	0	0	1
3800	U/A	0	0	0	0	0	1	0	1
3802	45	0	0	0	0	0	1	0	1
3803	U/A	0	0	0	0	0	1	0	1
4494	61	0	1	0	0	0	0	0	1
Total		652	221	134	103	93	76	21	1300

Table S2: Frequency of the *C. jejuni* STs with their CC designation isolated from different sources 'after intervention'.

		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
45	45	128	8	29	24	31	4	26	250
50	21	88	39	9	24	9	0	0	169
474	48	97	8	21	2	4	0	0	132
53	21	77	11	12	19	8	0	2	129
48	48	44	0	0	63	3	0	0	110
61	61	61	30	2	5	0	0	0	98
583	45	36	4	24	6	13	0	7	90
42	42	53	31	1	2	0	0	2	89
190	21	45	12	2	0	2	0	0	61
520	21	33	11	3	2	3	0	0	52
6964	354	7	0	9	11	16	0	0	43
2026	403	22	14	0	0	0	1	1	38
422	21	17	15	0	0	2	3	0	37
2345	206	22	0	12	2	0	0	1	37
257	257	24	1	7	2	1	0	0	35
21	21	21	4	0	1	8	0	0	34
354	354	15	0	11	0	5	0	0	31
436	U/A	20	7	0	0	0	0	0	27
1517	354	12	9	0	0	1	1	0	23
38	48	13	4	0	2	0	1	0	20
677	677	15	0	0	0	0	0	2	17
3105	U/A	1	0	13	1	2	0	0	17
1326	45	2	0	9	0	3	0	1	14
3711	257	12	1	0	1	0	0	0	14
137	45	8	0	1	0	0	0	4	13
51	443	9	0	2	0	0	0	0	11
508	508	9	2	0	0	0	0	0	11

Continue on next page

		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
1033	1034	1	0	1	0	1	0	8	11
3676	42	9	0	0	0	1	0	0	10
538	45	6	0	2	0	0	0	2	10
696	1332	1	0	4	0	1	0	3	9
1324	U/A	0	0	0	0	0	0	9	9
4337	21	7	0	0	2	0	0	0	9
486	21	3	0	0	5	0	0	0	8
52	52	3	0	4	0	0	0	0	7
535	460	0	0	5	2	0	0	0	7
995	U/A	0	0	0	0	0	0	7	7
2388	U/A	7	0	0	0	0	0	0	7
403	403	5	1	0	0	0	0	0	6
699	692	0	0	0	0	0	0	6	6
2389	U/A	0	0	3	2	1	0	0	6
3538	U/A	6	0	0	0	0	0	0	6
3610	21	5	1	0	0	0	0	0	6
3640	U/A	0	0	0	0	0	2	4	6
4499	U/A	0	0	0	0	0	0	6	6
25	45	4	0	1	0	0	0	0	5
177	177	0	1	0	0	0	0	4	5
618	61	1	4	0	0	0	0	0	5
710	U/A	0	0	0	0	0	0	5	5
991	692	1	2	0	0	0	0	2	5
2343	48	4	0	0	0	1	0	0	5
2350	48	4	0	0	1	0	0	0	5
2378	1034	0	0	0	0	0	1	4	5
2381	U/A	0	0	0	0	0	4	1	5
2535	U/A	3	0	0	0	1	0	1	5
3798	403	5	0	0	0	0	0	0	5
393	443	2	2	0	0	0	0	0	4

Continue on next page

		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
658	658	2	0	2	0	0	0	0	4
692	692	0	0	0	0	0	1	3	4
977	1034	1	0	0	0	0	0	3	4
992	U/A	0	0	1	0	0	1	2	4
1225	1275	0	0	0	0	0	4	0	4
1256	1034	0	0	0	0	0	0	4	4
1457	U/A	1	0	0	0	0	0	3	4
1525	U/A	0	0	0	0	0	0	4	4
2354	U/A	0	0	0	0	0	0	4	4
2391	1034	0	0	0	0	0	0	4	4
3961	U/A	0	0	0	0	0	0	4	4
4492	61	4	0	0	0	0	0	0	4
356	353	0	0	3	0	0	0	0	3
693	U/A	0	0	0	0	0	0	3	3
1286	U/A	0	0	0	0	0	0	3	3
1342	U/A	0	0	0	0	0	0	3	3
2347	U/A	0	0	0	0	0	0	3	3
2392	52	0	3	0	0	0	0	0	3
2584	692	2	0	0	0	1	0	0	3
3655	U/A	0	0	0	0	0	0	3	3
3721	354	0	0	3	0	0	0	0	3
5648	692	0	0	0	0	0	0	3	3
227	206	1	0	0	0	1	0	0	2
353	353	2	0	0	0	0	0	0	2
526	U/A	0	0	0	0	0	0	2	2
1223	1275	0	0	0	0	0	0	2	2
1255	1034	0	0	0	0	0	0	2	2
1304	1304	0	0	0	0	0	0	2	2
1900	658	0	0	0	2	0	0	0	2
2340	61	1	1	0	0	0	0	0	2

Continue on next page

		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
2351	U/A	0	0	0	0	0	0	2	2
2370	61	2	0	0	0	0	0	0	2
2380	U/A	2	0	0	0	0	0	0	2
3675	U/A	0	0	0	0	0	1	1	2
3717	21	2	0	0	0	0	0	0	2
3799	61	2	0	0	0	0	0	0	2
3959	61	0	2	0	0	0	0	0	2
4338	21	1	1	0	0	0	0	0	2
4497	U/A	0	0	0	0	0	1	1	2
4500	U/A	0	0	1	0	0	0	1	2
4508	U/A	0	0	0	0	0	0	2	2
5655	21	1	1	0	0	0	0	0	2
5656	354	0	2	0	0	0	0	0	2
6997	403	1	1	0	0	0	0	0	2
7769	21	2	0	0	0	0	0	0	2
8076	45	2	0	0	0	0	0	0	2
5	353	1	0	0	0	0	0	0	1
22	22	1	0	0	0	0	0	0	1
81	61	1	0	0	0	0	0	0	1
97	45	1	0	0	0	0	0	0	1
233	45	1	0	0	0	0	0	0	1
249	21	1	0	0	0	0	0	0	1
320	45	1	0	0	0	0	0	0	1
366	257	1	0	0	0	0	0	0	1
449	U/A	1	0	0	0	0	0	0	1
451	21	1	0	0	0	0	0	0	1
459	42	1	0	0	0	0	0	0	1
460	460	1	0	0	0	0	0	0	1
528	354	1	0	0	0	0	0	0	1
560	257	1	0	0	0	0	0	0	1

Continue on next page

		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
577	21	1	0	0	0	0	0	0	1
578	61	1	0	0	0	0	0	0	1
681	682	0	0	0	0	0	0	1	1
704	U/A	1	0	0	0	0	0	0	1
767	45	0	1	0	0	0	0	0	1
1232	353	1	0	0	0	0	0	0	1
1336	1275	0	0	0	0	0	0	1	1
1340	177	0	0	0	0	1	0	0	1
1919	52	1	0	0	0	0	0	1	1
1956	1034	0	0	0	0	0	0	1	1
1972	U/A	1	0	0	0	0	0	0	1
2076	353	1	0	0	0	0	0	0	1
2212	45	1	0	0	0	0	0	0	1
2341	61	1	0	0	0	0	0	0	1
2349	U/A	0	0	0	0	0	0	1	1
2353	U/A	0	0	0	0	0	0	1	1
2357	61	0	1	0	0	0	0	0	1
2537	177	0	0	0	0	0	0	1	1
2538	U/A	0	0	0	0	0	0	1	1
2619	U/A	0	0	0	0	0	1	0	1
2654	U/A	0	0	0	0	0	0	1	1
2895	574	1	0	0	0	0	0	0	1
2991	45	0	0	1	0	0	0	0	1
3456	45	0	1	0	0	0	0	0	1
3609	48	0	0	0	1	0	0	0	1
3643	U/A	0	0	0	0	0	1	0	1
3712	362	1	0	0	0	0	0	0	1
3716	21	0	1	0	0	0	0	0	1
3724	U/A	0	1	0	0	0	0	0	1
3792	257	0	0	0	1	0	0	0	1

Continue on next page

		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
3793	61	1	0	0	0	0	0	0	1
3801	U/A	0	0	0	0	0	1	0	1
3842	61	0	1	0	0	0	0	0	1
3844	U/A	0	0	0	0	0	1	0	1
4011	42	0	1	0	0	0	0	0	1
4336	U/A	0	0	0	0	0	0	1	1
4339	U/A	0	0	0	0	0	0	1	1
4496	U/A	0	0	0	0	0	0	1	1
4498	42	0	0	0	0	0	0	1	1
4501	U/A	0	0	0	0	0	0	1	1
4502	692	0	0	0	0	0	0	1	1
4503	42	0	0	0	0	0	0	1	1
4504	U/A	0	0	0	0	0	0	1	1
4505	21	1	0	0	0	0	0	0	1
4506	52	1	0	0	0	0	0	0	1
4507	U/A	1	0	0	0	0	0	0	1
4509	U/A	0	0	0	0	0	0	1	1
4524	U/A	0	0	0	0	0	0	1	1
4684	U/A	1	0	0	0	0	0	0	1
5012	48	0	0	0	1	0	0	0	1
5326	U/A	1	0	0	0	0	0	0	1
5540	21	0	1	0	0	0	0	0	1
5646	952	0	0	0	0	0	0	1	1
5649	21	1	0	0	0	0	0	0	1
5651	45	0	0	1	0	0	0	0	1
5652	U/A	0	1	0	0	0	0	0	1
5654	354	0	1	0	0	0	0	0	1
6130	362	1	0	0	0	0	0	0	1
7323	U/A	1	0	0	0	0	0	0	1
7765	61	1	0	0	0	0	0	0	1

Continue on next page

		Source							
ST	CC	Human	Ruminants	Supplier A	Supplier B	Supplier 'Others'	Environmental water	Wild birds	Total
7766	45	0	0	0	0	1	0	0	1
7771	21	1	0	0	0	0	0	0	1
7795	45	1	0	0	0	0	0	0	1
7796	61	1	0	0	0	0	0	0	1
8065	353	1	0	0	0	0	0	0	1
8066	45	0	0	0	0	1	0	0	1
8067	692	0	0	0	0	1	0	0	1
8069	45	1	0	0	0	0	0	0	1
8070	21	1	0	0	0	0	0	0	1
8072	45	0	1	0	0	0	0	0	1
8075	21	1	0	0	0	0	0	0	1
8184	42	1	0	0	0	0	0	0	1
8187	U/A	0	0	0	1	0	0	0	1
208	682	0	0	0	0	0	0	1	1
Total		1040	244	199	185	123	29	193	2013

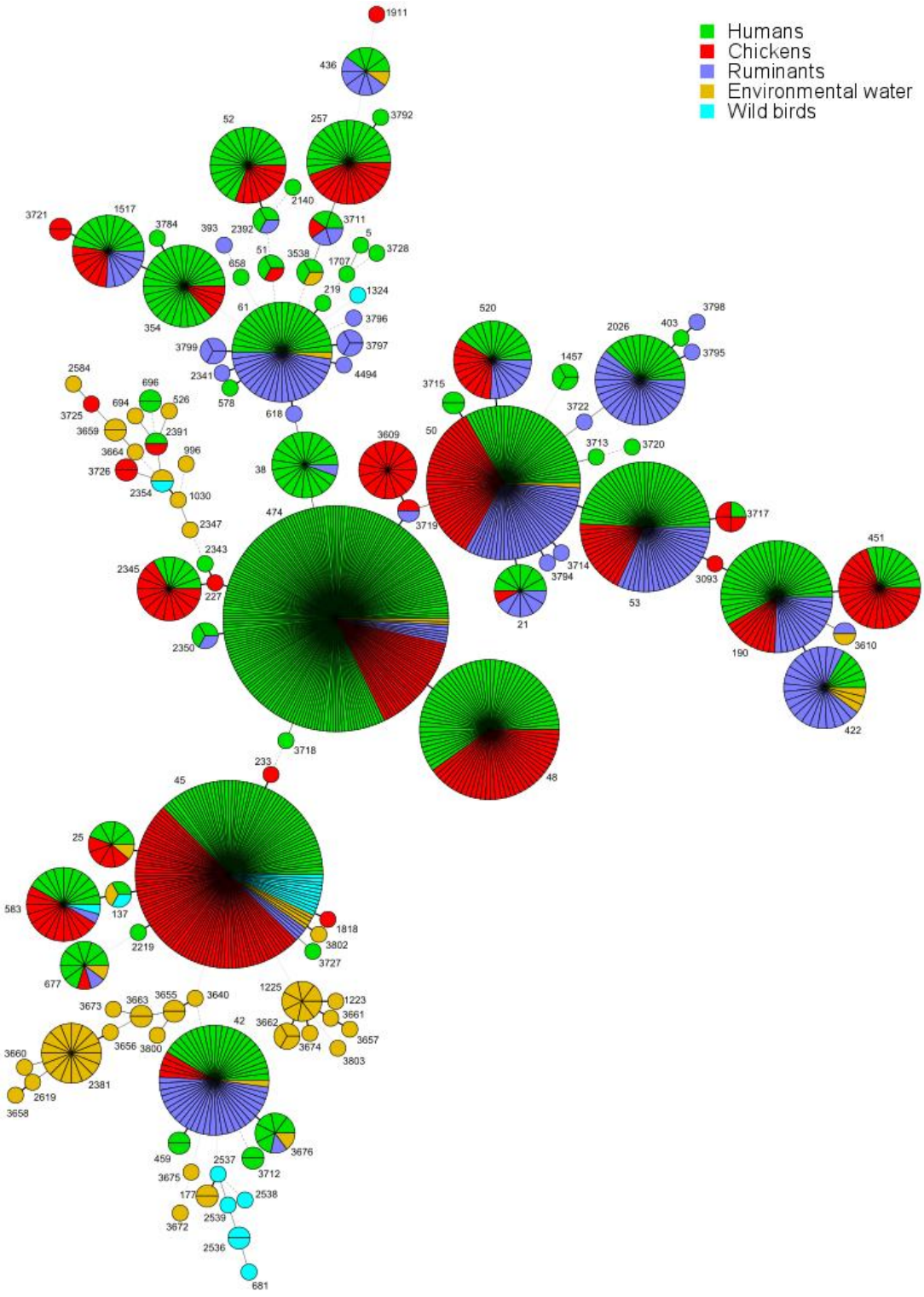

Fig. S1: Minimum spanning tree of *C. jejuni* STs from five different sources between 2005 and 2007 (‘before intervention’). Each node represents a ST, and its diameter is proportional to the

number of isolates. The different colors represent different sources. The thickness of the connecting lines is proportional to the similarities between STs, with the thickest connector linking single locus variants.

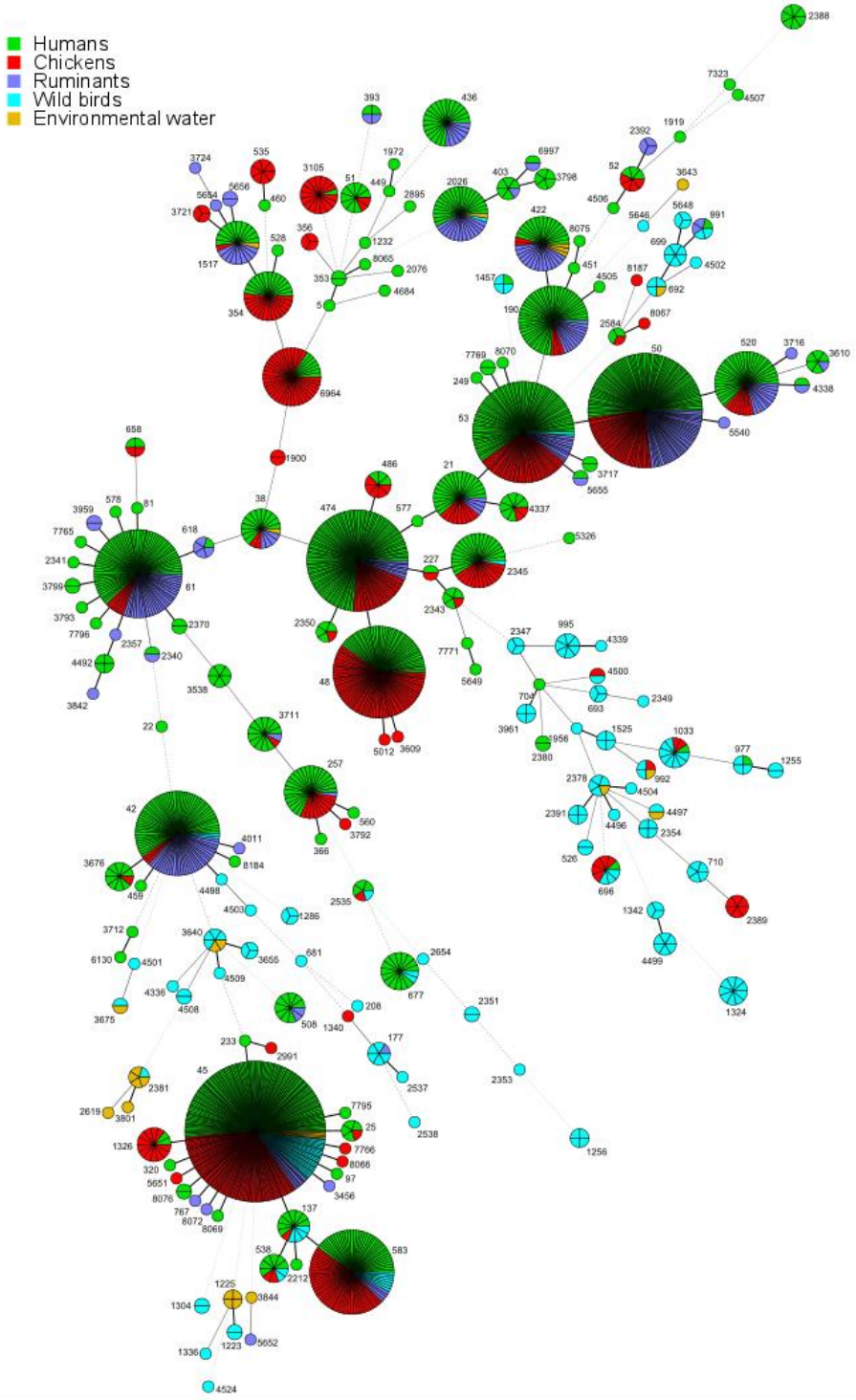

Fig. S2: Minimum spanning tree of *C. jejuni* STs from 5 different sources between 2008 and 2015 (‘after intervention’). Each node represents a ST, and its diameter is proportional to the number of isolates. The different colors represent different sources. The thickness of the

connecting lines is proportional to the similarities between STs, with the thickest connector linking single locus variants.

Table S3: Numerical indices measuring proportional similarity index, asymmetric island model and bayesian hierarchical model in *C. jejuni* (95% CrI are in brackets) after the intervention sources (The chicken suppliers are combined as one chicken source).

	Source				
Index	Human	Chickens	Ruminants	Environmental water	Wild birds
Proportional similarity index	NA	0.52 (0.47-0.55)	0.51 (0.44-0.54)	0.17 (0.06-0.18)	0.21 (0.16-0.23)
Asymmetric island model output	NA	0.48 (0.42-0.53)	0.47 (0.41-0.52)	0.02 (0.00-0.06)	0.02 (0.00-0.05)
Bayesian hierarchical model	NA	0.44 (0.35-0.52)	0.39 (0.31-0.50)	0.10 (0.00-0.19)	0.04 (0.00-0.11)