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Supplementary Table. Summary of published studies using multi-locus sequence typing for source attribution

Attribution Model	Source Animal Dataset	Clinical Dataset	Species	Attribution to Poultry (%)	Attribution to Other Sources (%)	>1 sample type per source	Self-attribution analysis (%)	Reference (First author/year)
STRUCTURE	Chicken 1,288 Cattle 586 Sheep 249 Wild bird 170 Environmental 91 from UK, USA, Europe, New Zealand 1990 – 2006	3,451 from Scotland 2005-2006	<i>C. jejuni</i>	46.4	31.0 ruminant 1.9 wild bird	Yes	No	Bessell (2012)
Asymmetric Island	Chicken 185 Cattle 171 Duck 70 Turkey 96 Pig 4 from Denmark Chicken 137 from other EU countries 2007 – 2008	406: 246 from Denmark 109 travel-related 51 unknown travel history 2007 - 2008	<i>C. jejuni</i>	52.0 Danish 17.0 imported	17.0 cattle 5.0 turkey 2.0 duck 7.0 pig	Yes	No	Boysen (2014)
Hald Model	Chicken 185 Cattle 171 Duck 70 Turkey 96 Pig 4 from Denmark Chicken 137 from other EU countries 2007 – 2008	406: 246 from Denmark 109 travel-related 51 unknown travel history 2007 - 2008	<i>C. jejuni</i>	38.0 Danish 14.0 imported	16.0 cattle 6.0 turkey 3.0 duck 0.0 pig	Yes	No	Boysen (2014)
STRUCTURE	Chicken 742 Cattle 582 Sheep 217 Wild bird 921 from UK, Sweden, Australia 1999 – 2006	5,618 from UK 2003 - 2013	<i>C. jejuni</i>	47.1 - 56.7	15.0 - 20.5 cattle 25.0 - 31.1 sheep 2.1 - 3.5 wild bird	No	No	Cody (2015)

Asymmetric Island	583 from Italy 6,854 from PubMLST (European) na	31 from Italy 2012	<i>C. jejuni</i>	69.8	8.3 cattle 5.3 small ruminant 7.3 wild bird 6.3 environmental 3.0 pork	Yes	No	Di Giannatale (2016)
Asymmetric Island	Chicken 275 Cattle 95 Sheep 136 Environmental water 92 Wild bird 22 from New Zealand 2005 - 2008	502 from New Zealand 2005 - 2008	<i>C. jejuni</i>	75.0	17.0 cattle 4.0 sheep 2.0 wild bird <1.0 water	Yes	No	French (2008)
Dutch Model	Chicken 275 Cattle 95 Sheep 136 Environmental water 92 Wild bird 22 from New Zealand 2005 - 2008	502 from New Zealand 2005 - 2008	<i>C. jejuni</i>	52.0	17.0 cattle 10.0 sheep 5.0 wild bird 11.0 water	Yes	No	French (2008)
Modified Hald	Chicken 275 Cattle 95 Sheep 136 Environmental water 92 Wild bird 22 from New Zealand 2005 - 2008	502 from New Zealand 2005 - 2008	<i>C. jejuni</i>	67.0	23.0 cattle 8.0 sheep 1.0 wild bird <1.0 water	Yes	No	French (2008)
STRUCTURE	Chicken 435 Cattle 73 Dog 134 from Switzerland and other countries 2003 - 2014	351 from Switzerland 2009	<i>C. jejuni</i>	44.0	36.0 cattle 20.0 dog	Yes	No	Jonas (2015)
STRUCTURE	Chicken 175 Cattle 24 Pig 256 from Switzerland and other countries 2008 - 2014	32 from Switzerland 2009	<i>C. coli</i>	76.0	16.0 cattle 8.0 pig	Yes	No	Jonas (2015)

STRUCTURE	Chicken 435 Dog 159 from Switzerland 2002 – 2012	649 from Switzerland 2002 - 2012	<i>C. jejuni</i>	76.8	23.2 dog	Yes	Yes; 62.5 chicken 38.1 dog	Kittl (2013)
STRUCTURE	Chicken 175 Pig 360 from Switzerland 2002 - 2012	81 from Switzerland 2002 - 2012	<i>C. coli</i>	86.4	13.6 pig	Yes	Yes; 79.8 chicken 70.1 pig	Kittl (2013)
STRUCTURE	Poultry 162 Cattle 40 Environmental 12 Slovenia, Austria, Germany 2002 – 2014	69 from Slovenia, Austria, Germany 2002 - 2014	<i>C. jejuni</i>	58.0	34.8 cattle 7.2 environmental	Yes	No	Kovac (2017)
STRUCTURE	Chicken 257 Cattle 87 Wild bird 63 Environmental water 266 from Canada 2005 – 2007	178 from Canada 2005 - 2007	<i>C. jejuni</i>	64.5	25.8 cattle 7.4 water 2.3 wild bird	No	No	Levesque (2013)
Asymmetric Island	Poultry 178 Cattle 98 Sheep 4 Goats 3 Pigs 2 Environmental water 207 from Luxembourg, The Netherlands, Belgium and France 2003 – 2014	1,153 from Luxembourg 2010 - 2013	<i>C. jejuni</i>	58.8	36.3 ruminant 4.9 environmental 0.2 swine	Yes	No	Mossong (2016)
Asymmetric Island	Poultry 150 Cattle 1 Goats 1 Pigs 60 Environmental water 122 from Luxembourg, The Netherlands, Belgium and France 2003 – 2014	136 from Luxembourg 2010 - 2013	<i>C. coli</i>	82.4	8.8 ruminant 4.5 environmental 4.4 swine	Yes	No	Mossong (2016)

Asymmetric Island	960 from The Netherlands, UK, Scotland and Switzerland - not detailed by species 1990 – 2006	696 from The Netherlands 2002 - 2003	<i>C. jejuni</i>	66.1	21.2 cattle 10.2 environmental 2.4 sheep 0.01 pig	Yes	No	Mughini Gras (2012)
Asymmetric Island	As above – not detailed by species	41 from The Netherlands 2002-2003	<i>C. coli</i>	70.0	12.2 cattle 8.9 environmental 5.0 sheep 4.9 pig	Yes	No	Mughini Gras (2012)
Asymmetric Island	Chicken 625 Cattle 168 Sheep 168 Pigs 160 Pets 133 Environmental 289 from The Netherlands, UK, Switzerland 1990 – 2006	737 from The Netherlands 2002 - 2003	<i>C. jejuni</i> & <i>C. coli</i>	77.0	18.0 cattle 2.0 environmental 2.0 sheep 1.0 pig	Yes	No	Mughini Gras (2013)
Modified Hald	Chicken 275 Cattle 95 Sheep 136 Environmental water 92 Wild bird 22 from New Zealand 2005 – 2008	773 from NZ 2005 - 2008	<i>C. jejuni</i>	80.0	10.0 cattle 9.0 sheep 4.0 environmental	Yes	No	Mullner (2009a)
Asymmetric Island	Chicken 275 Cattle 95 Sheep 136 Environmental water 92 Wild bird 22 from New Zealand 2005 – 2008	502 from New Zealand 2005 - 2008	<i>C. jejuni</i>	76.0	18.0 cattle	Yes	No	Mullner (2009b)
Modified Hald	Chicken 275 Cattle 95 Sheep 136 Environmental water 92 Wild bird 22 from New Zealand 2005 – 2008	502 from New Zealand 2005 - 2008	<i>C. jejuni</i>	>58.0 (58% from one poultry producer, total across 3 producers not given)	na	Yes	No	Mullner (2009b)

Dutch Model	Chicken 275 Cattle 95 Sheep 136 Environmental water 92 Wild bird 22 from New Zealand 2005 – 2008	502 from New Zealand 2005 - 2008	<i>C. jejuni</i>	58.0	19.0 cattle 12.0 environmental 11.0 sheep	Yes	No	Mullner (2009b)
Asymmetric Island	Poultry 108 Cattle 17 Sheep 32 Environmental water 11 from New Zealand 2009 - 2014	47 from New Zealand 2005 - 2014	<i>C. coli</i>	38.0	55.0 ruminant 7.0 environmental	No	No	Nohra (2016)
Asymmetric Island	Chicken 1,081 Cattle 200 Other poultry 101 Pig 10 Pet 164 from Germany, Luxembourg, Switzerland and The Netherlands 2003 – 2014	536 from Germany 2011 - 2014	<i>C. jejuni</i>	83.0	1.0 cattle 9.0 other poultry 16.0 pet 0.1 pig	Yes	No	Rosner (2017)
Asymmetric Island	Chicken 425 Pig 471 Pet 3 Cattle 7 Other poultry 59 from Belgium, France, Germany, Luxembourg, Switzerland, The Netherlands 2003 – 2011	76 2011-2014 460 from Luxembourg 2003 - 2013	<i>C. coli</i>	56.0	0.4 cattle 32.0 pig 4.0 pet 8.0 other poultry	Yes	No	Rosner (2017)
STRUCTURE	Chicken 459 Cattle 85 Sheep 57 Pigs 322 from Scotland 2005 – 2006	307 from Scotland 2005 - 2006	<i>C. coli</i>	40.0	41.0 sheep 14.0 cattle 6.0 pig	Yes	No	Roux (2013)

Modified Hald	811: Chicken Cattle Sheep Environmental water from New Zealand 2005 – 2008	572 from New Zealand 2005 - 2008	<i>C. jejuni</i>	62.0	25.6 cattle 8.8 sheep 3.2 water	Yes	No	Sears (2011)
Asymmetric Island	Chicken 1,288 Cattle 586 Sheep 249 Wild bird 170 Environmental 91 from UK, USA, Europe, New Zealand 1990 - 2006	4,743 from Scotland 2005 - 2006	<i>C. jejuni</i>	78.0	18.0 ruminant 4.0 wild bird & environment	Yes	Yes: 97 chicken 98 ruminant 77 wild bird 62 environmental	Sheppard (2009)
STRUCTURE	Chicken 1,288 Cattle 586 Sheep 249 Wild bird 170 Environmental 91 from UK, USA, Europe, New Zealand 1990 – 2006	4,743 from Scotland 2005 - 2006	<i>C. jejuni</i>	58.0	38.0 ruminant 4.0 wild bird & environment	Yes	Yes; 70 chicken 84 ruminant 54 wild bird 38 environmental	Sheppard (2009)
Asymmetric Island	Chicken 514 Cattle 98 Sheep 54 Pig 380 Turkey 110 Environmental 67 from UK, USA, Europe, New Zealand 1990 – 2006	504 from Scotland 2005 - 2006	<i>C. coli</i>	57.0	41.0 ruminant 1.0 pig 0.5 turkey 0.5 riparian	Yes	Yes; na	Sheppard (2009)
STRUCTURE	Chicken 459 Cattle 86 Sheep 57 Pigs 322 Turkey 111 UK, USA, Europe, New Zealand 1990 – 2006	504 from Scotland 2005 - 2006	<i>C. coli</i>	40.0	40.0 sheep 14.0 cattle 6.0 pig <1.0 turkey	Yes	Yes; na	Sheppard (2009)

Asymmetric Island	1,223 worldwide 2000 - 2008	500 from Scotland 2005 - 2006	<i>C. coli</i>	57.0	41.0 ruminant 1.0 swine 0.5 turkey 0.5 riparian	Yes	Yes; 95 chicken 89 ruminant 94 swine 92 turkey 88 riparian	Sheppard (2010)
Asymmetric Island	Chicken 400 Cattle 168 Sheep 160 Pig 133 Environmental 289 from The Netherlands, UK and Switzerland 1983 – 2007	1,208 from The Netherlands 2000 - 2011	<i>C. jejuni</i> & <i>C. coli</i>	68.0	24.0 cattle 6.0 environmental 2.0 sheep and pig	Yes	Yes; 89 chicken	Smid (2013)
STRUCTURE	680 from Scotland 2005 - 2006	202 from rural children Scotland 2000 - 2006	<i>C. jejuni</i> & <i>C. coli</i>	19.0	42.0 cattle 24.0 wild bird 12.0 sheep 3.0 pig	No	No	Strachan (2009)
STRUCTURE	680 from Scotland 2005 - 2006	76 from urban children Scotland 2000 - 2006	<i>C. jejuni</i> & <i>C. coli</i>	43.0	35.0 cattle 6.0 wild bird 15.0 sheep 1 pig	No	No	Strachan (2009)
STRUCTURE	84 from Scotland 2001	172 from Scotland 2001	<i>C. jejuni</i> & <i>C. coli</i>	47.7	19.5 cattle 11.2 sheep 19.6 wild bird 1.8 pig	No	No	Strachan (2013)
STRUCTURE	456 from Scotland 2005 – 2007	1,452 from Scotland 2005 - 2007	<i>C. jejuni</i> & <i>C. coli</i>	43.8	22.5 cattle 14.2 sheep 17.5 wild bird 0.03 pig	No	No	Strachan (2013)
STRUCTURE	708 from Scotland 2010 – 2012	1,292 from Scotland 2010 - 2012	<i>C. jejuni</i> & <i>C. coli</i>	48.7	12.7 cattle 26.8 sheep 9.2 wild bird 2.6 pig	No	No	Strachan (2013)

STRUCTURE*	Chicken 304 Cattle 43 Sheep 3 Wild bird 8 Environmental water 81 Duck 3 Dog 3 Goose 3 Other 52 from Europe and N. America 2001 – 2012	42 from France 2009	<i>C. jejuni</i>	45.8	46.9 ruminant 7.3 environmental	Yes	Yes; 80.7 chicken 68.2 ruminant	Thépault (2017)
STRUCTURE*	Chicken 304 Cattle 43 Sheep 3 Wild bird 8 Environmental water 81 Duck 3 Dog 3 Goose 3 Other 52 from Europe and N. America 2001 – 2012	281 from UK 2010 - 2011	<i>C. jejuni</i>	56.8	37.1 ruminant 6.1 environmental	Yes	Yes; 80.7 chicken 68.2 ruminant	Thépault (2017)
Asymmetric Island	Chicken 515 Cattle 282 Sheep 160 Pig 30 Wild bird 44 Rabbit 20 Sand 71 Water 23 from UK, Europe, Senegal, USA, New Zealand 1990 – 2000	1,231 from NW England 2000 - 2002	<i>C. jejuni</i>	56.5	35.0 cattle 4.3 sheep 0.8 pig 1.7 wild bird 0.6 rabbit 0.9 sand 0.2 water	Yes	No	Wilson (2008)

na: details not available.

* 15-locus MLST