Materials and methods S1

Origin and sources of S. Infantis isolates

North Italy includes Emilia region; Central Italy includes Umbria, Marche, and Lazio regions; South Italy includes Abruzzo, Molise and Sicilia regions. The sources of sampling are classified as follows: Farm, includes faeces and litter; Environmental swabs at slaughter include conveyor belt swab, floor slaughter swab, conveyor belt swab meat skewer, conveyor belt swab breast, conveyor belt swab drumstick, conveyor belt swab meat skewer; Samples at slaughter include neck skin, chicken liver and caecal content; Derived meat products include chickens wings, minced meat, breast, thigh, meat rolle, sliced chicken breast, chicken drumstick, meat skewer, chicken drumstick, grilled chicken, portioned chicken and chicken sausage.

Table S1. Resistance according to years (%) and result of pairwise comparisons.

Antimicrobials	Years				Sig. of overall test*
	2016	**2017**	**2018**	**2019**	
AMP	100.0a	100.0a	47.4b	87.5a	***p* < 0.001**
AMC	26.7	7.4	0.0	29.2	*p* = 1.000
AMS	20.0a	48.1ab	31.6a	70.8b	***p* = 0.002**
CAZ	0.0	33.3	5.3	0.0	*p* = 1.000
CIP	46.7a	14.8ab	15.8ab	4.2b	***p* = 0.033**
CL	100.0a	92.6a	47.4b	70.8ab	***p* < 0.001**
CLOR	40.0	3.7	0.0	45.8	*p* = 1.000
CTX	100.0a	92.6a	47.4b	83.3a	***p* < 0.001**
FEP	86.7	85.2	63.2	75.0	*p* = 0.252
FOX	6.7	7.4	5.3	0.0	*p* = 1.000
GENT	6.7	3.7	0.0	50.0	*p* = 1.000
IMP	0.0	0.0	5.3	0.0	*p* = 1.000
MEM	0.0	11.1	21.1	0.0	*p* = 1.000
NA	100.0	100.0	94.7	95.8	*p* = 1.000
SUL	93.3	96.3	68.4	95.8	*p* = 1.000
TE	100.0	100.0	94.7	91.7	*p* = 1.000

* Overall Test results for Time effect of Models including Matrix and Time (year) effects, *p* value from Wald Chi-square. Resistances were categorized in a binary variable as resistant (=1) or sensitive (=0, including sensitive and intermediate). Values in bold are statistically significant at an alpha of 0.05.

Table S2. Resistance according to matrix (%) and result of pairwise comparisons.

Antimicrobials	Matrices				Sig. of overall test*
	Farm	Slaughter	Derived Meat Products	Environmental samples	
AMP	86.7	88.9	80.0	77.8	$p = 1.000$
AMC	26.7	19.4	8.0	0.0	$p = 1.000$
AMS	46.7	52.8	32.0	55.6	$p = 0.280$
CAZ	20.0	0.0	24.0	11.1	$p = 1.000$
CIP	33.3	16.7	12.0	11.1	$p = 0.603$
CL	86.7	80.6	76.0	55.6	$p = 1.000$
CLOR	20.0	41.7	0.0	0.0	$p = 1.000$
CTX	93.3	83.3	76.0	66.7	$p = 1.000$
FEP	86.7	75.0	80.0	66.7	$p = 0.715$
FOX	13.3	2.8	0.0	11.1	$p = 1.000$
GENT	6.7	36.1	0.0	0.0	$p = 1.000$
IMP	6.7	0.0	0.0	0.0	$p = 1.000$
MEM	26.7	0.0	0.0	33.3	$p = 1.000$
NA	93.3	100.0	100.0	88.9	$p = 1.000$
SUL	100.0	91.7	84.0	77.8	$p = 0.126$
TE	100.0	94.4	100.0	88.9	$p = 1.000$

* Overall Test results for Time effect of Models including Matrix and Time (year) effects, p value from Wald Chi-square. Resistances were categorized in a binary variable as resistant (=1) or not resistant (=0, including sensitive and intermediate). Values in bold are statistically significant at an alpha of 0.05.