

Figure S1. *mcr-9* plasmid in isolate 28945. Antimicrobial resistance genes are labeled in red, with additional genes labeled if related to metal resistance, insertion sequences, or plasmid maintenance/transfer.

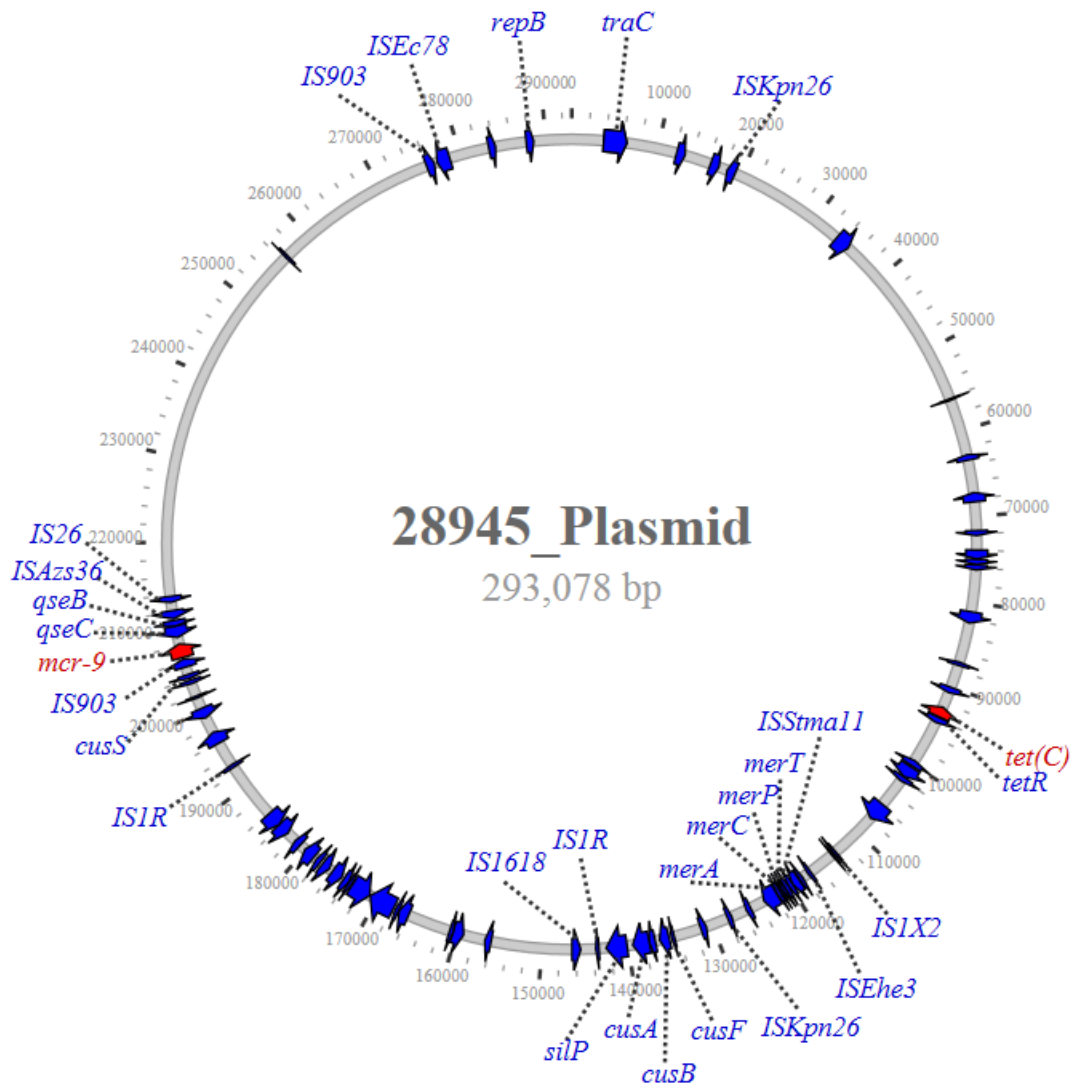


Figure S2. Multidrug-resistance *mcr-9* plasmid in N18EC0432. Antimicrobial resistance genes are labeled in red, with additional genes labeled if related to metal resistance, insertion sequences, or plasmid maintenance/transfer.

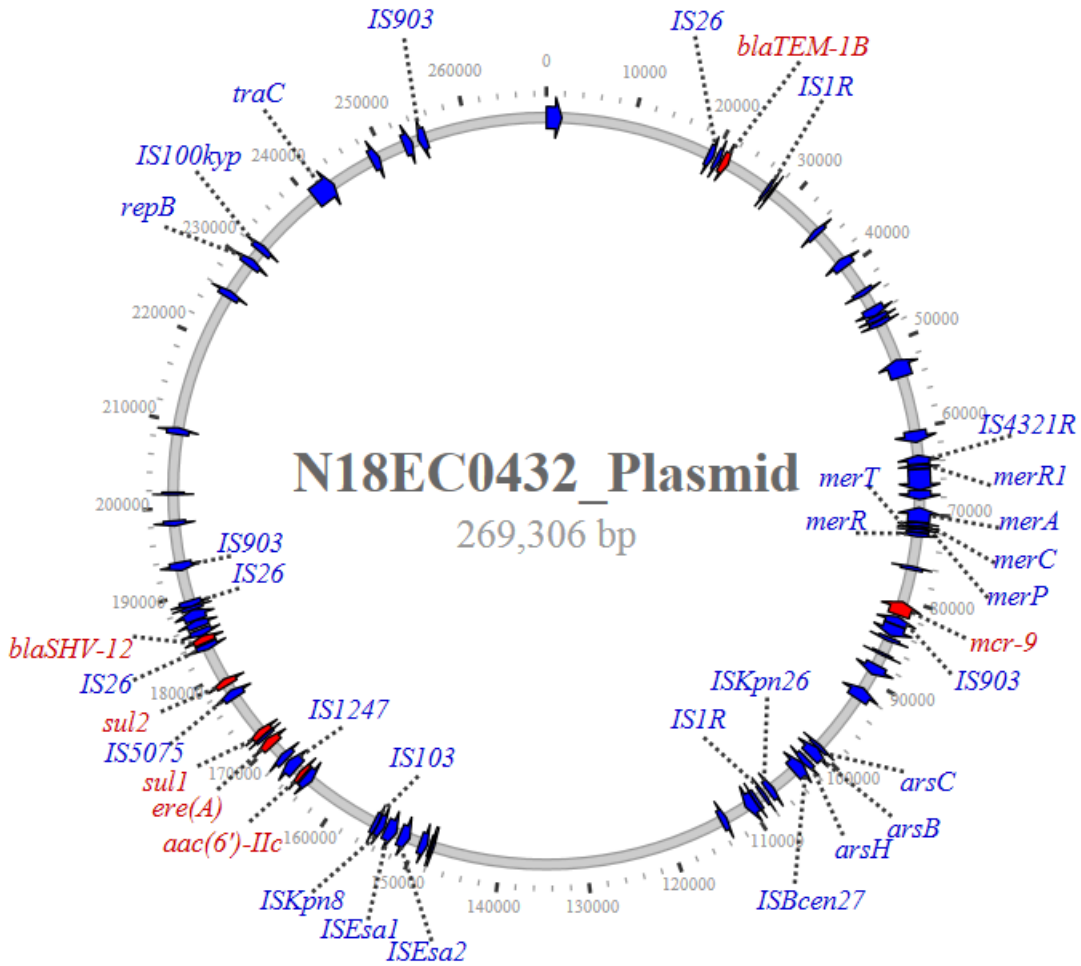


Figure S3. Multidrug-resistance *mcr-9* plasmid in N53023. Antimicrobial resistance genes are labeled in red, with additional genes labeled if related to metal resistance, insertion sequences, or plasmid maintenance/transfer.

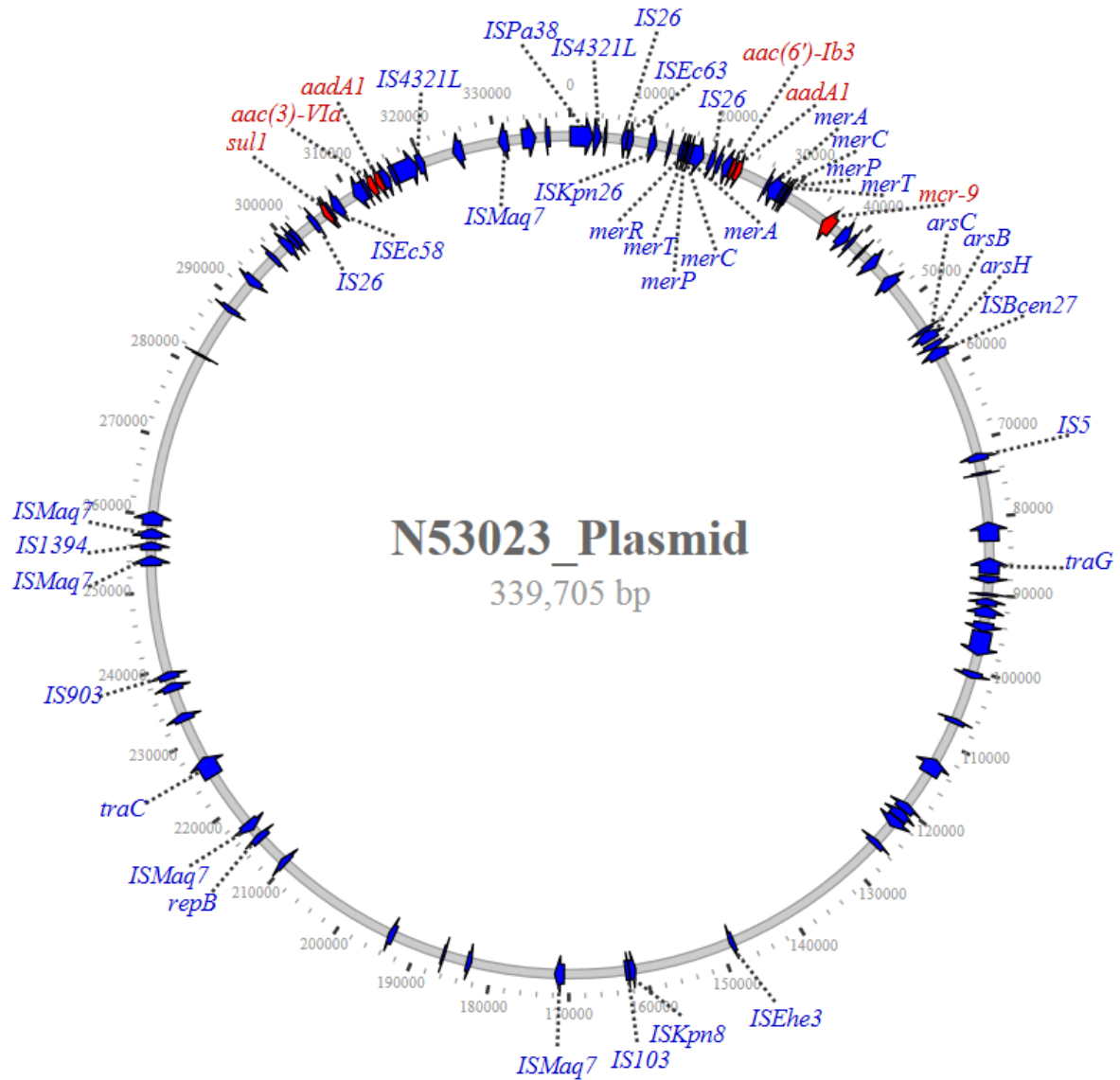


Table S1. Isolate-level susceptibility data and metadata

Isolate ID	Organism	Serotype	State	Collection Year	Isolation Source	NCBI accession	COL	POL	qseBC
CVM 22018	<i>S. enterica</i>	Saintpaul	OR	2002	Ground Turkey	SRR1200761	<= 0.25	= 0.5	
CVM 22149	<i>S. enterica</i>	Saintpaul	GA	2002	Ground Turkey	SRR1200748	<= 0.25	= 0.5	
CVM 28945	<i>S. enterica</i>	Schwarzengrund	MN	2003	Ground Turkey	SRR1272497	= 0.5	= 1	qseBC
CVM 29191	<i>S. enterica</i>	Saintpaul	GA	2003	Ground Turkey	SRR1299269	<= 0.25	= 0.5	
CVM 29197	<i>S. enterica</i>	Schwarzengrund	GA	2003	Ground Turkey	SRR1300672	= 0.5	= 0.5	qseBC
N129	<i>S. enterica</i>	Saintpaul	CO	2004	Ground Turkey	SRR1793249	<= 0.25	= 0.5	
N132	<i>S. enterica</i>	Saintpaul	CO	2004	Ground Turkey	SRR1805680	<= 0.25	= 0.5	
N153	<i>S. enterica</i>	Schwarzengrund	CT	2004	Ground Turkey	SRR1813455	= 0.5	= 1	qseBC
N505	<i>S. enterica</i>	Schwarzengrund	NY	2004	Ground Turkey	SRR949384	= 0.5	= 0.5	qseBC
N1566	<i>S. enterica</i>	Schwarzengrund	MD	2004	Ground Turkey	SRR1562599	<= 0.25	= 1	qseBC
N4500	<i>S. enterica</i>	Saintpaul	CO	2005	Ground Turkey	SRR1805588	<= 0.25	= 0.5	
N4633	<i>S. enterica</i>	Saintpaul	GA	2005	Ground Turkey	SRR3224092	<= 0.25	= 0.5	
N1532	<i>S. enterica</i>	Schwarzengrund	GA	2005	Ground Turkey	SRR1553749	= 0.5	= 0.5	qseBC
N9133	<i>S. enterica</i>	Saintpaul	CO	2006	Ground Turkey	SRR1801550	<= 0.25	= 1	
N9162	<i>S. enterica</i>	Saintpaul	CT	2006	Ground Turkey	SRR1823688	= 0.5	= 0.5	
N13112	<i>S. enterica</i>	Saintpaul	CO	2007	Ground Turkey	SRR1946971	<= 0.25	= 0.5	
N13136	<i>S. enterica</i>	Saintpaul	NM	2007	Ground Turkey	SRR1951844	= 0.5	= 0.5	
N14334	<i>S. enterica</i>	Saintpaul	TN	2007	Pork Chop	SRR2071081	= 0.5	= 0.5	
N16446	<i>S. enterica</i>	Saintpaul	TN	2008	Ground Turkey	SRR2669160	<= 0.25	= 0.5	
N18397	<i>S. enterica</i>	Saintpaul	GA	2008	Ground Turkey	SRR2982346	= 0.5	= 0.5	
N20013	<i>S. enterica</i>	Saintpaul	CO	2009	Ground Turkey	SRR3111274	= 0.5	= 0.5	
N20062	<i>S. enterica</i>	Mbandaka	CT	2009	Chicken Breast	SRR3115191	= 0.5	= 0.5	
N23563	<i>S. enterica</i>	Senftenberg	NY	2009	Chicken Breast	SRR3740201	<= 0.25	= 0.5	
N23649	<i>S. enterica</i>	Saintpaul	SC	2009	Ground Beef	SRR3184156	<= 0.25	= 0.5	
N23663	<i>S. enterica</i>	Saintpaul	TN	2009	Ground Beef	SRR3184161	<= 0.25	= 0.5	
N23664	<i>S. enterica</i>	Saintpaul	TN	2009	Ground Beef	SRR3184167	<= 0.25	= 0.5	
N23725	<i>S. enterica</i>	Saintpaul	GA	2010	Ground Turkey	SRR3098666	<= 0.25	= 0.5	
N23767	<i>S. enterica</i>	Saintpaul	MN	2010	Ground Turkey	SRR3098649	= 0.5	= 2	

N29340	<i>S. enterica</i>	Saintpaul	MN	2011	Ground Turkey	SRR3665001	<= 0.25	= 1	
N29348	<i>S. enterica</i>	Heidelberg	PA	2011	Ground Turkey	SRR3665009	<= 0.25	= 0.5	
N29361	<i>S. enterica</i>	Saintpaul	CO	2011	Ground Turkey	SRR3665022	= 1	= 0.5	
N29367	<i>S. enterica</i>	Litchfield	NM	2011	Chicken Breast	SRR1840618	<= 0.25	= 0.5	
N29374	<i>S. enterica</i>	Saintpaul	NM	2011	Ground Turkey	SRR3665034	<= 0.25	= 0.5	
N29376	<i>S. enterica</i>	Saintpaul	NM	2011	Ground Turkey	SRR3665036	<= 0.25	= 0.5	
N30638	<i>S. enterica</i>	Saintpaul	CT	2011	Ground Turkey	SRR3665047	<= 0.25	= 0.5	
N30653	<i>S. enterica</i>	Saintpaul	GA	2011	Ground Turkey	SRR3665062	= 0.5	= 1	
N30654	<i>S. enterica</i>	Saintpaul	GA	2011	Ground Turkey	SRR3665063	<= 0.25	= 0.5	
N30697	<i>S. enterica</i>	Saintpaul	NY	2011	Ground Turkey	SRR3665106	<= 0.25	<= 0.25	
N30698	<i>S. enterica</i>	Saintpaul	NY	2011	Ground Turkey	SRR3665107	<= 0.25	= 0.5	
N30699	<i>S. enterica</i>	Saintpaul	NY	2011	Ground Turkey	SRR3665108	<= 0.25	= 0.5	
N31831	<i>S. enterica</i>	Saintpaul	CO	2011	Ground Turkey	SRR3665159	<= 0.25	= 1	
N31832	<i>S. enterica</i>	Saintpaul	CO	2011	Ground Turkey	SRR3665160	= 0.5	= 0.5	
N31836	<i>S. enterica</i>	Saintpaul	CO	2011	Ground Turkey	SRR3665164	= 0.5	= 0.5	
N31838	<i>S. enterica</i>	Saintpaul	CO	2011	Ground Turkey	SRR3665166	= 0.5	= 0.5	
N31845	<i>S. enterica</i>	Saintpaul	MD	2011	Ground Turkey	SRR3665172	<= 0.25	= 0.5	
N32764	<i>S. enterica</i>	Kentucky	NM	2011	Chicken Breast	SRR3665218	<= 0.25	= 0.5	
N37906	<i>S. enterica</i>	Saintpaul	CO	2011	Ground Turkey	SRR3665259	<= 0.25	= 1	
N38936	<i>S. enterica</i>	Saintpaul	NY	2012	Ground Turkey	SRR3664693	<= 0.25	= 0.5	
N40385	<i>S. enterica</i>	Saintpaul	MD	2012	Ground Turkey	SRR3664742	<= 0.25	= 0.5	
N40391	<i>S. enterica</i>	Saintpaul	NM	2012	Ground Turkey	SRR3664748	= 1	= 1	
N41750	<i>S. enterica</i>	Schwarzengrund	NY	2012	Ground Turkey	SRR3664819	= 0.5	= 1	
N42475	<i>S. enterica</i>	Saintpaul	LA	2012	Ground Turkey	SRR3664907	= 0.5	= 0.5	
N42481	<i>S. enterica</i>	Saintpaul	MO	2012	Ground Turkey	SRR3664913	<= 0.25	= 0.5	
N42519	<i>S. enterica</i>	Saintpaul	MD	2012	Ground Turkey	SRR3664950	= 1	= 1	
N43456	<i>S. enterica</i>	Saintpaul	CO	2013	Ground Turkey	SRR2566867	= 0.5	= 0.5	
N43461	<i>S. enterica</i>	Saintpaul	LA	2013	Ground Turkey	SRR2566872	<= 0.25	= 0.5	
N45394	<i>S. enterica</i>	Saintpaul	LA	2013	Ground Turkey	SRR2566941	= 0.5	= 0.5	
N45926	<i>S. enterica</i>	Saintpaul	CT	2013	Ground Turkey	SRR2566962	<= 0.25	= 0.5	
N45953	<i>S. enterica</i>	Saintpaul	NM	2013	Ground Turkey	SRR2566986	<= 0.25	= 0.5	

N46823	<i>S. enterica</i>	Saintpaul	CO	2013	Ground Turkey	SRR2567004	<= 0.25	= 0.5	
N46830	<i>S. enterica</i>	Saintpaul	LA	2013	Ground Turkey	SRR2567011	<= 0.25	= 0.5	
N46832	<i>S. enterica</i>	Saintpaul	LA	2013	Ground Turkey	SRR2567013	= 0.5	= 0.5	
N47719	<i>S. enterica</i>	Saintpaul	NM	2013	Ground Turkey	SRR2567051	= 0.5	= 0.5	
N50423	<i>S. enterica</i>	Saintpaul	MN	2013	Ground Turkey	SRR2567105	= 0.5	= 0.5	
N51271	<i>S. enterica</i>	Heidelberg	MD	2013	Ground Turkey	SRR2567164	<= 0.25	= 0.5	
N51291	<i>S. enterica</i>	Saintpaul	NM	2013	Ground Turkey	SRR2567184	= 0.5	= 0.5	
N52030	<i>S. enterica</i>	Saintpaul	MN	2014	Ground Turkey	SRR2407551	<= 0.25	= 0.5	
N52036	<i>S. enterica</i>	Saintpaul	NY	2014	Ground Turkey	SRR2407557	<= 0.25	= 0.5	
N53023	<i>S. enterica</i>	Heidelberg	GA	2014	Ground Turkey	SRR2407600	<= 0.25	= 0.5	
N53024	<i>S. enterica</i>	Saintpaul	GA	2014	Ground Turkey	SRR2407601	= 0.5	= 0.5	
N53034	<i>S. enterica</i>	Saintpaul	MD	2014	Ground Turkey	SRR2407610	= 0.5	= 0.5	
N53045	<i>S. enterica</i>	Albany	MN	2014	Ground Turkey	SRR2407621	= 0.5	= 0.5	
N54702	<i>S. enterica</i>	Albany	CO	2014	Ground Turkey	SRR2407719	<= 0.25	= 0.5	
N56232	<i>S. enterica</i>	Heidelberg	CT	2015	Ground Turkey	SRR3295527	<= 0.25	= 0.5	
N58011	<i>S. enterica</i>	Johannesburg	NY	2015	Chicken Breast	SRR3295596	<= 0.25	= 1	
N58631	<i>S. enterica</i>	Heidelberg	CT	2015	Ground Turkey	SRR3932930	= 0.5	= 0.5	
N58640	<i>S. enterica</i>	Albany	GA	2015	Ground Turkey	SRR3932939	= 0.5	= 1	
N62445	<i>S. enterica</i>	Albany	GA	2015	Ground Turkey	SRR3932995	<= 0.25	= 0.5	
N62485	<i>S. enterica</i>	Heidelberg	NY	2015	Ground Turkey	SRR3933030	<= 0.25	= 0.5	
N62491	<i>S. enterica</i>	Heidelberg	OR	2015	Ground Turkey	SRR3933036	<= 0.25	= 0.5	
N62531	<i>S. enterica</i>	Heidelberg	CO	2015	Ground Turkey	SRR3933071	<= 0.25	= 0.5	
N62952	<i>S. enterica</i>	Saintpaul	MD	2015	Ground Turkey	SRR4280628	= 0.5	= 0.5	
N16S133	<i>S. enterica</i>	Saintpaul	MD	2016	Ground Turkey	SRR6350898	= 0.5	= 1	
N16S270	<i>S. enterica</i>	Saintpaul	MD	2016	Ground Turkey	SRR6351095	= 1	= 0.5	
N16S300	<i>S. enterica</i>	Heidelberg	MO	2016	Ground Turkey	SRR6350817	<= 0.25	= 1	
N16S320	<i>S. enterica</i>	Heidelberg	NY	2016	Ground Turkey	SRR6350800	<= 0.25	= 0.5	
N16S321	<i>S. enterica</i>	Heidelberg	NY	2016	Ground Turkey	SRR6350795	= 0.5	= 0.5	
N16S324	<i>S. enterica</i>	Heidelberg	NY	2016	Ground Turkey	SRR6351110	= 1	= 0.5	
N16S325	<i>S. enterica</i>	Heidelberg	NY	2016	Ground Beef	SRR6351107	<= 0.25	= 0.5	
N16S366	<i>S. enterica</i>	Heidelberg	MD	2016	Ground Turkey	SRR6351137	<= 0.25	= 0.5	

N16S371	<i>S. enterica</i>	Heidelberg	MN	2016	Ground Turkey	SRR6351142	= 0.5	= 0.5	
N16S396	<i>S. enterica</i>	Heidelberg	NY	2016	Ground Turkey	SRR6351092	<= 0.25	= 1	
N16S397	<i>S. enterica</i>	Heidelberg	NY	2016	Ground Turkey	SRR6351091	= 0.5	= 0.5	
N16S410	<i>S. enterica</i>	Heidelberg	TN	2016	Ground Turkey	SRR6350952	<= 0.25	= 0.5	
N17S166	<i>S. enterica</i>	I 4,[5],12:i:-	MN	2017	Ground Turkey	SRR7907656	<= 0.25	= 1	
N17S304	<i>S. enterica</i>	Heidelberg	PA	2017	Ground Turkey	SRR7907864	= 0.5	= 0.5	
N17S1352	<i>S. enterica</i>	Heidelberg	MD	2017	Ground Turkey	SRR7907589	<= 0.25	= 0.5	
N17S1465	<i>S. enterica</i>	I 4,[5],12:i:-	SC	2017	Pork Chop	SRR7907745	<= 0.25	= 0.5	
N18S1350	<i>S. enterica</i>	Albany	TX	2018	Ground Turkey	SRR10857510	<= 0.25	= 0.5	
N18EC052	<i>E. coli</i>	N/A	TN	2018	Chicken legs	SRR9002373	<= 0.25	<= 0.25	qseBC
N18EC0282	<i>E. coli</i>	N/A	GA	2018	ground beef	SRR9002289	<= 0.25	<= 0.25	qseBC
N18EC0288	<i>E. coli</i>	N/A	MD	2018	Chicken legs	SRR9984932	<= 0.25	= 0.5	qseBC
N18EC0432	<i>E. coli</i>	N/A	CA	2018	Chicken wings	SRR9984823	<= 0.25	<= 0.25	
N18EC1010	<i>E. coli</i>	N/A	PA	2018	Ground Turkey	SRR9984843	<= 0.25	= 0.5	
N19EC0438	<i>E. coli</i>	N/A	OR	2019	Chicken Breast	SRR9324324	= 0.5	= 0.5	qseBC
DH5alpha	<i>E. coli</i>						<= 0.25	<= 0.25	
DH5alpha (pN53023)	<i>E. coli</i>						<= 0.25	<= 0.25	

Table S2. Isolate-level long-read sequencing data

Strain ID	BioSample	Serotype	Sequence	PlasmidFinder	length	GenBank accession	Resistance genes
CVM 28945	SAMN02640938	<i>S. Schwarzengrund</i>	chromosome		4,754,451	CP048301	
			p28945-1	IncFII	100,159	CP048302	
			p28945-2	IncHI2, IncH2A	293,078	CP048303	<i>mcr-9.1, tet(C)</i>
N14748	SAMN03276122	<i>S. Saintpaul</i>	chromosome		4,986,471	CP048926	<i>mcr-9.1, tet(B)</i>
			pN14748	IncX1	53210	CP048927	<i>blaTEM-1, aph(3'')-Ib</i>
N1566	SAMN02782579	<i>S. Schwarzengrund</i>	chromosome		4,799,306	CP048297	
			pN1566-1	IncI1	109,943	CP048298	<i>aadA1, aac(3)-VIa, qacEdelta1, sul1, blaTEM-1</i>
			pN1566-2	IncHI2, IncH2A	293,131	CP048299	<i>tet(C), mcr-9.1</i>
			pN1566-3	IncFII	99,529	CP048300	
N16S133	SAMN08114010	<i>S. Saintpaul</i>	chromosome		4,915,695	CP049986	<i>tet(B), mcr-9.1</i>
			pN16S133	IncX1	43,420	CP049987	<i>blaTEM-1</i>
N16S321	SAMN08114190	<i>S. Heidelberg</i>	chromosome	IncHI2, IncH2A	5,129,736	CP049313	<i>sul1, qacEdelta1, aac(3)-VIa, aadA1, mcr-9.1, fosA1</i>
N18EC0432	SAMN12359680	<i>E. coli</i>	chromosome		4,933,292	CP048290	<i>blaEC, sul2</i>
			pN18EC0432-1	IncHI2, IncH2A	269,306	CP048293	<i>mcr-9.1, blaTEM-1, blaSHV-12, sul2, sul1, qacEdelta1, ere(A), arr, aac(3)-II, aac(6')-IIc</i>
			pN18EC0432-2	IncFII, IncFIB	137,411	CP048296	<i>tet(A), aac(3)-VIa, blaTEM,</i>
			pN18EC0432-3	IncI1	99,802	CP048295	<i>blaCMY-2</i>

			pN18EC0432-4	IncX1	47,739	CP048291	
			pN18EC0432-5	Col	2,461	CP048292	
N18S2238	SAMN12930429	S. Albany	chromosome		5,163,233	CP049312	<i>mcr-9.1, tet(B), aac(6')-Ib4, aadA1</i>
N40391	SAMN05201855	S. Saintpaul	chromosome		4,845,998	CP049983	<i>tet(B), mcr-9.1</i>
			pN40391-1	IncI1	114,945	CP049984	<i>blaTEM-1, aac(3)-IId, aadA1, tet(A)</i>
			pN40391-2		19,804	CP049985	
N52030	SAMN03988231	S. Saintpaul	chromosome		4,944,213	CP049981	<i>mcr-9, tet(B)</i>
			pN52030		43,418	CP049982	<i>blaTEM-1</i>
N53023	SAMN03988280	S. Heidelberg	chromosome		4,821,913	CP049310	
			pN53023		339,705	CP049311	<i>aac(6')-Ib4, aadA1, sul1, qacEdelta1, aac(3)-VIA, aadA1, mcr-9.1</i>
N58011	SAMN04576680	S. Johannesburg	chromosome		4,723,925	CP049308	
			pN58011	IncHI2, IncH2A	310,945	CP049309	<i>mcr-9.1</i>
N58631	SAMN05416424	S. Heidelberg	chromosome			CP049306	
			pN58631	IncHI2, IncH2A	338,025	CP049307	<i>sul1, aac(3)-VIa, ant(3'')-Ia, aac(6')-Ib-cr, mcr-9</i>