

**Supplementary Table S1: Symptoms reported to Health Protection Team in enhanced surveillance of confirmed enteric fever cases in England 2014-2019 for whom symptoms could be ascertained (n=1789):**

<b>Symptom</b>	<b>S. Typhi</b> (n=1025)		<b>S. Paratyphi A</b> (n=684)		<b>S. Paratyphi B</b> (n=80)		<b>Total</b> (n=1789)	
	n	(%)	n	(%)	n	(%)	n	(%)
Fever	963	(94%)	619	(91%)	68	(85%)	1650	(92%)
Diarrhoea	664	(65%)	379	(55%)	57	(71%)	1100	(61%)
Headache	508	(50%)	346	(51%)	37	(46%)	891	(50%)
Abdominal Pain	440	(43%)	282	(41%)	46	(58%)	768	(43%)
Vomiting	422	(41%)	214	(31%)	32	(40%)	668	(37%)
Rigors	288	(28%)	172	(25%)	20	(25%)	480	(27%)
Cough	227	(22%)	127	(19%)	11	(14%)	365	(20%)
Constipation	72	(7%)	63	(9%)	4	(5%)	139	(8%)
Rash	39	(4%)	20	(3%)	3	(4%)	62	(3%)
<i>Any GI Symptom</i> <sup>1</sup>	837	(82%)	504	(74%)	67	(84%)	1408	(79%)
<i>Asymptomatic</i>	6	(1%)	8	(1%)	1	(1%)	15	(1%)

<sup>1</sup>Diarrhoea, abdominal pain, vomiting, or constipation.

**Supplementary Table S2: Univariable analysis of *Salmonella* Typhi resistance to ciprofloxacin(n=1025):**

Characteristic	Group	n	(%)	OR	95% CI	P-value
		<b>Resistant</b>				
Gender	Female	441	(90%)	1.00	.	0.145
	Male	497	(93%)	1.39	(0.89-2.16)	
Age Group	Adult (≥18yr)	582	(90%)	1.00		0.019
	Child (<18yr)	356	(94%)	1.81	(1.09-2.99)	
Deprivation	1 Most dep.	281	(89%)	1.00	.	0.052*
	2	251	(91%)	1.23	(0.71-2.14)	
	3	150	(94%)	1.76	(0.84-3.68)	
	4	98	(92%)	1.28	(0.59-2.77)	
	5 Least dep.	90	(96%)	2.64	(0.91-7.71)	
UK Born	No	513	(90%)	1.00	.	0.080
	Yes	366	(93%)	1.54	(0.95-2.50)	
VFR <sup>1</sup>	No	161	(87%)	1.00		0.009
	Yes	712	(93%)	1.94	(1.17-3.21)	
Travel-associated	Direct	929	(92%)	1.00		<0.001
	Propagated	9	(69%)	0.20	(0.06-0.67)	
<b>Source Location</b>						
India	No	546	(88%)	1.00		<0.001
	Yes	392	(96%)	<b>3.45</b>	(1.93-6.14)	
Pakistan	No	521	(87%)	1.00		<0.001
	Yes	417	(98%)	<b>6.16</b>	(3.11-12.21)	
Bangladesh	No	870	(92%)	1.00		0.295
	Yes	68	(88%)	<b>0.68</b>	(0.33-1.41)	
Other Asia	No	897	(93%)	1.00		<0.001
	Yes	41	(67%)	<b>0.15</b>	(0.08-0.28)	
Africa	No	904	(93%)	1.00		<0.001
	Yes	34	(60%)	<b>0.10</b>	(0.06-0.19)	

\*Chi-squared test for trend. <sup>1</sup>Visiting friends and relatives.

**Supplementary Table S3: Univariable analysis of resistance of *Salmonella* Typhi to amoxicillin, chloramphenicol, co-trimoxazole, and ciprofloxacin (MDR+FQ; n=1024):**

Characteristic	Group	n	(%)	OR	95% CI	P-value
		<b>Resistant</b>				
Gender	Female	121	(25%)	1.00	.	0.128
	Male	155	(29%)	1.24	(0.94-1.64)	
Age Group	Adult (≥18yr)	146	(23%)	1.00	.	<0.001
	Child (<18yr)	130	(34%)	1.80	(1.35-2.38)	
Deprivation	1 Most dep.	114	(36%)	1.00	.	<0.001*
	2	68	(25%)	0.58	(0.40-0.83)	
	3	32	(20%)	0.44	(0.28-0.69)	
	4	28	(26%)	0.62	(0.38-1.02)	
	5 Least dep.	15	(16%)	0.33	(0.18-0.61)	
UK Born	No	133	(23%)	1.00	.	0.010
	Yes	121	(31%)	1.46	(1.09-1.95)	
VFR <sup>1</sup>	No	33	(18%)	1.00	.	0.002
	Yes	224	(29%)	1.89	(1.26-2.85)	
Travel-associated	Direct	272	(27%)	1.00	.	0.755
	Propagated	4	(31%)	1.21	(0.37-3.96)	
<b>Source Location</b>						
India	No	267	(43%)	1.00	.	<0.001
	Yes	9	(2%)	<b>0.03</b>	(0.01-0.06)	
Pakistan	No	54	(9%)	1.00	.	<0.001
	Yes	222	(52%)	<b>10.9</b>	(7.41-16.00)	
Bangladesh	No	257	(27%)	1.00	.	0.640
	Yes	19	(25%)	<b>0.88</b>	(0.51-1.51)	
Other Asia	No	260	(27%)	1.00	.	0.896
	Yes	16	(26%)	<b>0.96</b>	(0.53-1.73)	
Africa	No	259	(27%)	1.00	.	0.615
	Yes	17	(30%)	<b>1.16</b>	(0.65-2.09)	

\*Chi-squared test for trend. <sup>1</sup>Visiting friends and relatives.

**Supplementary Table S4: Univariable analysis of *Salmonella* Paratyphi A resistance to ciprofloxacin (n=704):**

Characteristic	Group	n	(%)	OR	95% CI	P-value
		<b>Resistant</b>				
Gender	Female	343	(98%)	1.00	.	0.815
	Male	344	(97%)	0.89	(0.34-2.34)	
Age Group	Adult (≥18yr)	555	(99%)	1.00	.	0.166
	Child (<18yr)	132	(97%)	3.81	(0.50-29.07)	
Deprivation	1 Most dep.	212	(98%)	1.00	.	0.031*
	2	194	(99%)	4.57	(0.53-39.85)	
	3	117	(99%)	2.76	(0.32-24.05)	
	4	66	(96%)	0.52	(0.12-2.24)	
	5 Least dep.	72	(94%)	0.34	(0.09-1.22)	
UK Born	No	361	(98%)	1.00	.	0.321
	Yes	281	(97%)	0.61	(0.22-1.65)	
VFR <sup>1</sup>	No	147	(94%)	1.00	.	<0.001
	Yes	497	(99%)	5.63	(1.99-15.95)	
Travel-associated	Direct	682	(98%)	1.00	.	0.724
	Propagated	5	(100%)	.	.	
<b>Source Location</b>						
India	No	345	(96%)	1.00	.	0.002
	Yes	342	(99%)	<b>7.43</b>	(1.67-33.13)	
Pakistan	No	456	(97%)	1.00	.	0.016
	Yes	231	(99%)	<b>8.11</b>	(1.06-62.10)	
Bangladesh	No	618	(97%)	1.00	.	0.571
	Yes	69	(99%)	<b>1.79</b>	(0.23-13.70)	
Other Asia	No	628	(99%)	1.00	.	<0.001
	Yes	59	(86%)	<b>0.07</b>	(0.02-0.19)	
Africa	No	684	(98%)	1.00	.	<0.001
	Yes	3	(43%)	<b>0.01</b>	(0.003-0.08)	

\*Chi-squared test for trend. <sup>1</sup>Visiting friends and relatives.