

### Antimicrobial susceptibility of *Salmonella*, 2003

A representative sample of 613 non-typhoidal *Salmonella*, chosen from isolates routinely referred to ESR for serotyping in 2003, were tested for antimicrobial susceptibility. The sample comprised 348 human and 265 animal/environmental isolates.

Resistance to each of the 10 antimicrobials tested is shown in Table 1. Antimicrobial resistance among *Salmonella* remains relatively low, with 94.5% fully susceptible to all 10 antimicrobials. Just over half (55.9%) of the resistant isolates were multiresistant to  $\geq 3$  antimicrobials. Chloramphenicol was the only antimicrobial for which there was a statistically significant difference ( $P < 0.05$ ) in the rate of resistance among *Salmonella* isolated from human sources and those isolated from other sources.

Table 1. Antimicrobial resistance among non-typhoidal *Salmonella*, 2003

Antimicrobial	Percent resistance		
	All isolates n = 613	Human isolates n = 348	Animal and environmental isolates n = 265
Ampicillin	1.5	1.7	1.1
Cephalothin	0.3	0	0.8
Chloramphenicol	0.8	1.4	0
Ciprofloxacin	0	0	0
Co-trimoxazole	1.0	1.4	0.4
Gentamicin	0.3	0.6	0
Streptomycin	3.4	2.6	4.5
Sulphonamides	3.6	3.2	4.2
Tetracycline	3.4	3.5	3.4
Trimethoprim	1.0	1.4	0.4

All *S. Typhi*, *S. Paratyphi A* and *S. Paratyphi B* isolates referred to ESR in 2003 were tested for susceptibility to the same 10 antimicrobials as the non-typhoidal *Salmonella* (Table 2). One *S. Typhi* isolate, acquired in India, was multiresistant to ampicillin, chloramphenicol, co-trimoxazole, streptomycin, sulphonamides, tetracycline and trimethoprim. Two *S. Paratyphi B* var Java isolates were multiresistant to ampicillin, chloramphenicol, streptomycin, sulphonamides and tetracycline.

Table 2. Antimicrobial resistance among *Salmonella* Typhi and *S. Paratyphi*, 2003

Antimicrobial	Percent resistance			
	<b>S. Typhi n = 18</b>	<b>S. Paratyphi A n = 10</b>	<b>S. Paratyphi B n = 2</b>	<b>S. Paratyphi B var Java n = 9</b>
Ampicillin	5.6	0	0	22.2
Cephalothin	5.6	0	0	0
Chloramphenicol	11.1	0	0	22.2
Ciprofloxacin	0	0	0	0
Co-trimoxazole	5.6	0	0	0
Gentamicin	0	0	0	0
Streptomycin	33.3	0	0	22.2
Sulphonamides	5.6	0	0	22.2
Tetracycline	5.6	0	0	22.2
Trimethoprim	5.6	0	0	0