Supplementary Data. Number of nontyphoidal *Salmonella* isolates that came fromblood submitted to NARMS, by serotype and resistance pattern, 2003–2013*a*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Serotype | No. (%) of isolates | AMP | AUG | AXO | AZMb | CHL | CIP | TMP–  SMX | Sulfac | FOX | | | GEN | KAN | | | NAL | STR | | TET | TIO | |
| Enteritidis | 250 (21.0%) | 19 | 4 | 2 | 0 | 2 | 17 | 2 | 6 | 3 | | 0 | | 1 | | 21 | | 4 | 8 | | 2 |
| Typhimurium | 190 (16.0%) | 80 | 57 | 4 | 0 | 68 | 8 | 11 | 93 | 4 | | 4 | | 13 | | 4 | | 88 | 82 | | 4 |
| Heidelberg | 119 (10.0%) | 38 | 23 | 17 | 0 | 5 | 0 | 1 | 15 | 16 | | 19 | | 27 | | 0 | | 30 | 36 | | 17 |
| Newport | 64 (5.4%) | 8 | 7 | 7 | 0 | 8 | 0 | 3 | 9 | 7 | | 0 | | 3 | | 0 | | 9 | 9 | | 7 |
| Dublin | 47 (4.0%) | 30 | 22 | 21 | 0 | 33 | 5 | 3 | 33 | 21 | | 1 | | 20 | | 5 | | 32 | 33 | | 21 |
| Oranienburg | 44 (3.7%) | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | | 0 | | 0 | | 0 | | 0 | 0 | | 0 |
| Montevideo | 31 (2.6%) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | 1 | | 1 | | 0 | | 1 | 1 | | 0 |
| Javiana | 28 (2.4%) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | 0 | | 0 | | 1 | | 1 | 1 | | 0 |
| I 4,[5],12:i:- | 28 (2.4%) | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | | 0 | | 0 | | 0 | | 1 | 2 | | 0 |
| Poona | 26 (2.2%) | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | 0 | | 0 | | 1 | | 0 | 1 | | 0 |
| Saintpaul | 25 (2.1%) | 2 | 1 | 1 | 0 | 1 | 2 | 1 | 1 | 1 | | 1 | | 0 | | 1 | | 1 | 8 | | 1 |
| Schwarzengrund | 22 (1.9%) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | | 0 | | 0 | | 1 | | 0 | 1 | | 0 |
| Sandiego | 19 (1.6%) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | 0 | | 0 | | 1 | 0 | | 0 |
| Panama | 16 (1.4%) | 2 | 0 | 0 | 1 | 3 | 1 | 2 | 2 | 0 | | 1 | | 0 | | 0 | | 2 | 3 | | 0 |
| Paratyphi B var. L(+) tartrate+ | 14 (1.2%) | 3 | 2 | 0 | 0 | 2 | 0 | 1 | 3 | 0 | | 0 | | 0 | | 0 | | 3 | 3 | | 0 |
| Infantis | 14 (1.2%) | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | | 0 | | 1 | | 1 | | 0 | 2 | | 1 |
| Muenchen | 11 (0.9%) | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | | 0 | | 0 | | 0 | | 0 | 0 | | 0 |
| Agona | 11 (0.9%) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | | 0 | | 0 | | 0 | | 2 | 3 | | 0 |
| Rubislaw | 10 (0.8%) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | 0 | | 0 | | 0 | 0 | | 0 |
| Other*d* | 220 (18.5%) | 15 | 3 | 2 | 0 | 8 | 16 | 8 | 22 | 4 | | 7 | | 4 | | 13 | | 19 | 34 | | 3 |
| Total | 1,189 | 201 | 120 | 55 | 1 | 136 | 53 | 34 | 192 | 59 | 34 | | | | 70 | 48 | | 194 | | 227 | 56 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Serotype | No. (%) of isolates | Fully susceptible | | | Resistance to a first-line agente | Resistant to ≥1 agent | | | Resistant to ≥3 classes | Resistant to ≥5 classes | ACSSuT *f* | | ACSSuTAuCx *g* | | ASSuT*h* | AAuCx *i* |
| Enteritidis | 250 (21.0%) | | 210 | 32 | | | 40 | 5 | | 1 | 1 | 1 | | | 0 | 2 |
| Typhimurium | 190 (16.0%) | | 89 | 85 | | | 101 | 89 | | 66 | 59 | 1 | | | 9 | 4 |
| Heidelberg | 119 (10.0%) | | 67 | 38 | | | 52 | 34 | | 16 | 3 | 0 | | | 4 | 16 |
| Newport | 64 (5.4%) | | 55 | 8 | | | 9 | 9 | | 7 | 7 | 7 | | | 1 | 7 |
| Dublin | 47 (4.0%) | | 12 | 33 | | | 35 | 34 | | 30 | 28 | 20 | | | 0 | 21 |
| Oranienburg | 44 (3.7%) | | 41 | 0 | | | 3 | 0 | | 0 | 0 | | | 0 | 0 | 0 |
| Montevideo | 31 (2.6%) | | 30 | 0 | | | 1 | 1 | | 0 | 0 | | | 0 | 0 | 0 |
| Javiana | 28 (2.4%) | | 25 | 1 | | | 3 | 0 | | 0 | 0 | | | 0 | 0 | 0 |
| I 4[5],12:i- | 28 (2.4%) | | 26 | 2 | | | 2 | 1 | | 1 | 1 | | | 0 | 0 | 0 |
| Poona | 26 (2.2%) | | 24 | 2 | | | 2 | 0 | | 0 | 0 | | | 0 | 0 | 0 |
| Saintpaul | 25 (2.1%) | | 17 | 4 | | | 8 | 4 | | 0 | 0 | | | 0 | 0 | 1 |
| Schwarzengrund | 22 (19%) | | 20 | 1 | | | 2 | 0 | | 0 | 0 | | | 0 | 0 | 0 |
| Sandiego | 19 (1.6%) | | 18 | 0 | | | 1 | 0 | | 0 | 0 | | | 0 | 0 | 0 |
| Panama | 16 (1.4%) | | 13 | 2 | | | 3 | 3 | | 1 | 1 | | | 0 | 0 | 0 |
| Paratyphi B var. L(+) tartrate+ | 14 (1.2%) | | 11 | 3 | | | 3 | 3 | | 2 | 2 | | | 0 | 1 | 0 |
| Infantis | 14 (1.2%) | | 11 | 1 | | | 3 | 1 | | 1 | 0 | | | 0 | 0 | 0 |
| Muenchen | 11 (0.9%) | | 10 | 1 | | | 1 | 1 | | 0 | 0 | | | 0 | 0 | 0 |
| Agona | 11 (0.9%) | | 6 | 0 | | | 5 | 1 | | 0 | 0 | | | 0 | 0 | 0 |
| Rubislaw | 10 (0.8%) | | 10 | 0 | | | 0 | 0 | | 0 | 0 | | | 0 | 0 | 0 |
| Otherd | 220 (18.5%) | | 173 | 24 | | | 47 | 19 | | 8 | 3 | | | 1 | 5 | 2 |
| Total | 1,189 | | 868 | 237 | | | 321 | 205 | | 133 | 105 | | | 30 | 20 | 53 |

*a*Antimicrobial agents: AMP, ampicillin; AUG, amoxicillin-clavulanic acid; AXO, ceftriaxone; AZM, azithromycin; CHL, chloramphenicol; CIP, ciprofloxacin; TMP–SMX , trimethoprim-sulfamethoxazole; Sulfa, sulfonamides; FOX, cefoxitin; GEN, gentamicin; KAN, kanamycin; NAL, nalidixic acid; STR, streptomycin; TET, tetracycline; TIO, ceftiofur. For single antimicrobials and resistance to ≥1 agent, ≥3 classes, or ≥5 classes, resistance is defined as an intermediate or resistant MIC.

*b*Azithromycin was not routinely tested prior to 2011.

*c*Sulfamethoxazole was tested prior to 2004 and sulfisoxazole was tested from 2004 to 2013.

*d*Serotypes with <10 blood isolates are listed in the “Other” category.

eResistant to one or more of the following antimicrobial agents: ampicillin, ceftriaxone, ciprofloxacin, or trimethoprim-sulfamethoxazole.

*f*Resistant to at least ampicillin, chloramphenicol, streptomycin, a sulfonamide, and tetracycline.

*g*Resistant to at least ACSSuT, amoxicillin-clavulanic acid, and ceftriaxone.

*h*Resistant to at least ampicillin, streptomycin, a sulfonamide, and tetracycline, but not chloramphenicol.

*i*Resistant to at least ampicillin, amoxicillin-clavulanic acid, and ceftriaxone.