



International surveillance network for The enteric infections - Salmonella and VTEC O157

Funded by the European Commission – DG SANCO

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Enter-net Quarterly Salmonella Report - 01/2

April – June 2001

Summary.

This report gives details of the number of isolates identified by the national reference laboratories in the second quarter of 2001 and incorporated in the Enter-net salmonella database. Fourteen countries have supplied data, of which thirteen supplied data electronically. Serotypes with unusual increases over the same period in 2000 are shown in figure one, the total number of serotypes isolated by country this year, population data and travel-related infections are detailed in table one. Table two details the top fifteen serotypes isolated in the Enter-net salmonella database and gives comparable data for the same period in 2000. Table three illustrates Salmonella antimicrobial resistance data received for the quarter. The total number of human salmonella isolates reported this quarter is 21,184 with 17,719 (83.6%) being *S. Enteritidis*, *S. Typhimurium*, *S. Virchow* or *S. Hadar*

Quarterly data - major trends.

Details below refer to the thirteen countries that have supplied comparable data electronically for 2001 and 2000. The total number of reports in the database show a decrease over the same period of 2000 from 25,945 to 21,184. The main serotypes have decreased in comparison to isolates in the 2nd quarter of 2000, *S. Enteritidis* (14,272 isolates in the 2nd quarter of 2001, 67.4% of the total) decreased by 15.0%, *S. Typhimurium* (2,750, 13.0%) by 26.0%, *S. Virchow* (359, 1.7%) decreased by 15.1% and *S. Hadar* (338, 1.6%) by 38.5%. Five other serotypes were identified more than 100 times during the quarter; *S. Infantis* (155, 0.7%), *S. Newport* (138, 0.7%), *S. Saintpaul* (125, 0.6%), *S. Bovismorbificans* (116, 0.5%) and *S. Brandenburg* (108, 0.5%).

Fifteen other serotypes were isolated between 50 and 99 times; *S. Paratyphi A*, *S. Heidelberg*, *S. Stanley*, *S. Anatum*, *S. Typhi*, *S. Agona*, *S. Braenderup*, *S. Derby*, *S. Birkenhead*, *S. Blockley*, *S. Muenchen*, *S. Java*, *S. Oranienburg*, *S. Bareilly*, and *S. Chester* – 1,078 of the total, 5.0%. Forty-two serotypes were reported between 10 and 49 times totaling 1,060, 5.0% and 153 serotypes were reported less than 10 times, 359, 1.6%; 326 (1.5%), have not been fully serotyped at time of report.

May 30, 2002

All data are provisional

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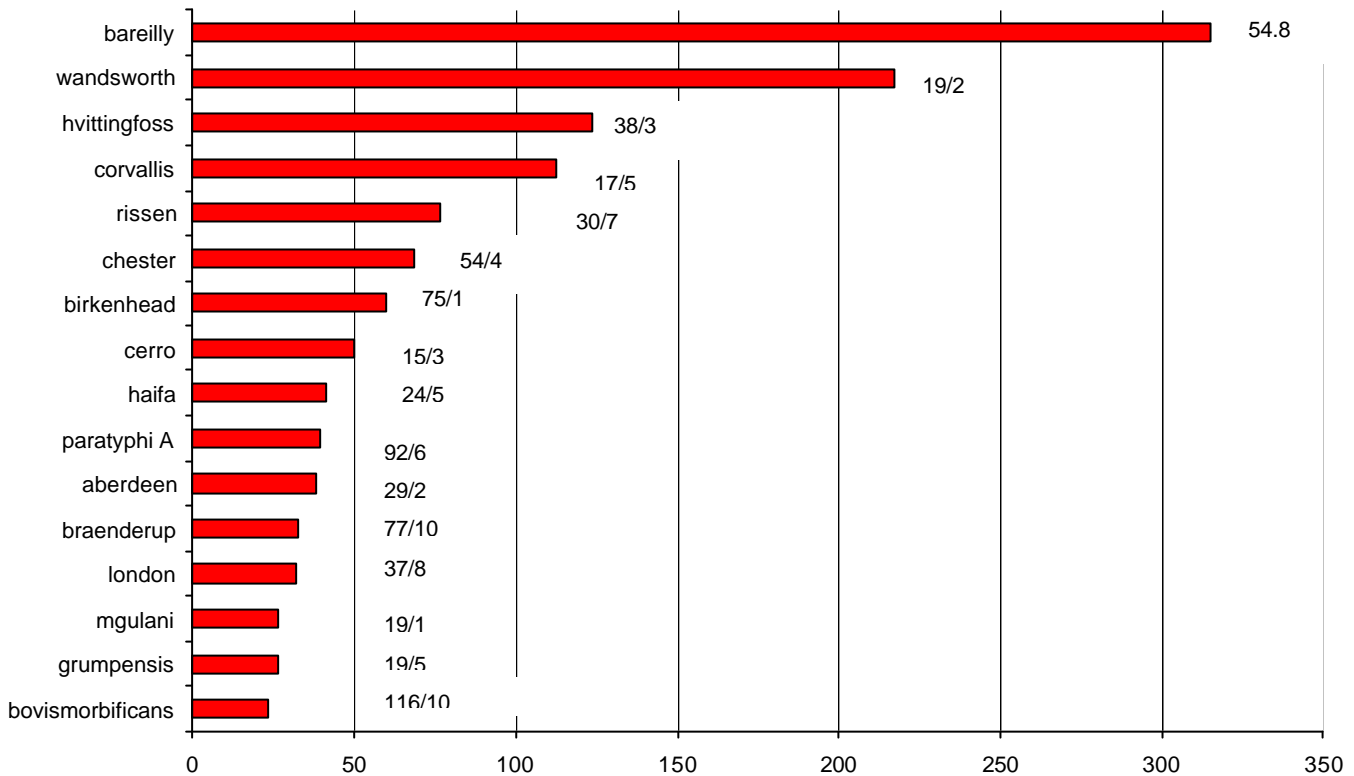
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Serotypes with unusual increases this quarter, and number of countries reporting



Descriptive Epidemiology of the above serotypes

S. Bareilly – 54 cases reported this quarter. Twenty-one males and thirty-one females. Three were aged between 0-11m, five were aged between 1-5y, eight were aged between 6-14y, thirty-four were aged between 15-64y. Four were aged 65y+. 16 cases were travel related 10 traveled to India and one traveled to Indonesia. Five were unstated.

S. Wandsworth - Of the nineteen cases reported, were travel related. Six traveled to Andorra. Of the total number reported there were fifteen males and four females. Three were aged 1-5y and sixteen were aged 15-64y.

S. Hvittingfoss – 38 cases reported in total there were 23 males and 12 females. Six were aged between 0-11m, 12 were aged between 1-5 years, one was aged between 6-14y, 13 were aged between 15-64y and three were unknown. Of the total only two were related to travel.

S. Corvallis – Of the 17 cases reported five were related to travel, two to Morocco, two to Tunisia and one to Turkey. There were five males, seven females, two aged 0-11m, one aged 1-5y, seven aged 15-64y and two aged 65+. Five unknown.

S. Rissen – Thirty cases reported. Twelve males, 13 females. Two aged between 0-11m, four aged between 1-5y, four aged between 6-14y. Thirteen were aged between 15-64y and one was aged 65y+. There were four unknown. Of the total there were seven travel related cases, five traveled to Thailand, one to India and one to Turkey.

S. Chester - Three cases travel related from the 54 cases reported. Of the total there were 18 males and 34 females. Fourteen aged between 0-11m, 11 were aged between 1-5y, nine were aged between 6-14y and 13 were aged between 15-64y. Five were aged 65y+.

S. Birkenhead - Seventy-five cases were reported in total. 34 males and 41 females. There

were 18 aged between 0-11m, 15 aged between 1-5y, 5 were aged between 6-14y and 35 were aged between 15-64y. Two cases were 65y+. No travel related cases.

**Table 2 – Enter-net Salmonella database
Top 15 serotypes reported in Q2 2001 (Q2
2001).**

Serotype	Freq	%
Enteritidis	14,272 (17,733)	67.4. (63.6)
Typhimurium	2,750 (4,123)	13.0 (14.7)
Virchow	359 (457)	1.7 (1.6)
Hadar	338 (603)	1.6 (2.2)
Infantis	155 (396)	0.7 (1.4)
Newport	138 (139)	0.7 (0.5)
Saint-Paul	125 (180)	0.6 (0.6)
Bovismorbificans	116 (106)	0.5 (0.4)
Brandenburg	108 (211)	0.5 (0.8)
Paratyphi A	92 (68)	0.4 (0.2)
Heidelberg	87 (153)	0.4 (0.5)
Stanley	87 (108)	0.4 (0.4)
Anatum	81 (89)	0.4 (0.3)
Typhi	79 (127)	0.4 (0.5)
Agona	78 (127)	0.4 (0.5)
Others	2,319 (3,236)	10.9 (11.6)
Total	21,184 (27,856)	100 (100)

quarter, none were travel related. There were seven females, 12 males. Ten were aged 0-11m, seven were aged 1-5y, one was aged 15-64y and one was aged 65y+.

S. Grumpensis - Nineteen cases reported. Nine male and nine female. Four were aged 1-5y, two were aged 6-14y, 11 were aged 15-64 and one was unstated. Eight of the cases were related to travel. Seven traveled to Gambia and one to Pakistan.

S. Bovismorbificans – One hundred and sixteen cases reported. Fifty-seven were males and 52 were female. Thirteen were aged 0-11m, 16 were aged 1-5y, 12 were aged 6-14y, fifty-one were aged 15-64y and 17 were aged 65y+. Seven cases were unstated. There were four travel related cases. Two traveled to Thailand, one traveled to Tunisia and one traveled to Zambia.

S. Cerro – Fourteen cases reported in total. Six were male and four female. Two of the cases were 0-11m, one was 1-5y. Six were 15-64 and one was 65y+. Three of the cases reported were travel related countries traveled were China, India and Pakistan.

S. Haifa – Of the 22 cases reported four cases were related to travel, country visited was Egypt. There were six males, 15 females and one unknown.

S. Paratyphi A – There were 92 cases reported in this quarter. Fifty-four were male, 35 female and three unknown. Of the total cases reported 63 cases were travel related. Six traveled to Bangladesh, two traveled to Indonesia, 17 traveled to India, 30 traveled to Pakistan and two traveled to Turkey.

S. Aberdeen - There were 29 cases reported this quarter. Of the total none were travel related. There were 16 males and 12 females and one unknown. There were 17 cases aged 0-11m, six cases aged 1-5y, three cases aged 15-64y and two aged 65y+.

S. Braenderup – Seventy-seven cases reported in total. Thirty-six males and 38 females. One case aged between 0-11m, four cases aged between 1-5y, two cases aged 6-14y, fifty-four were aged 15-64, nine were aged 65+. Twenty-eight cases were travel related. Countries traveled included Spain, India, Kenya, Peru Thailand and the Maldives.

S. London – Thirty-seven cases were reported in total this quarter. Eleven males and 19 females. Two were related to travel one to Thailand and other unknown.

S. Mgulani – Of the 19 cases reported this

Antimicrobial susceptibility testing results (table 3)

Antibiotic	Resistant Freq (%)	Intermediate Freq (%)	Sensitive Freq (%)
Ampicillin	469 (26.9)	39 (2.2)	1,234 (70.9)
Chloramphenicol	288 (16.5)	0 (0.0)	1,454 (83.5)
Streptomycin	461 (29.8)	103 (6.7)	981 (63.5)
Sulphonamides	935 (60.5)	109 (7.1)	501 (32.4)
Tetracyclines	495 (28.4)	523 (30.0)	724 (41.6)
Trimethoprim	108 (6.2)	20 (1.1)	1,614 (92.7)
Ciprofloxacin	12 (0.7)	3 (0.2)	1,727 (99.1)
Gentamicin	36 (2.3)	132 (8.5)	1,377 (89.1)
Kanamycin	22 (1.3)	119 (6.8)	1,601 (91.9)
Nalidixic Acid	277 (17.9)	2 (0.1)	1,266 (82.0)
Cefotaxime	2 (0.1)	0 (0.0)	1,543 (99.9)

Antimicrobial susceptibility test results were available for 1,742 cases. The majority of these are tested against the full panel of 11 antibiotics recommended by Enter-net, although not all strains are tested against each antimicrobial. The frequency and percent in the categories resistant, intermediate and sensitive are given in

table 3