



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

Funded by the European Commission – DG SANCO

Project Leaders Dr Noël Gill Prof Bill Reilly Dr Henry Smith

**Enter-net Quarterly Salmonella Report - 00/2**

**April - June 2000**

**Summary.**

This report gives details of the number of isolates identified by the national reference laboratories in the second quarter of 2000 and incorporated in the Enter-net salmonella database. Nineteen countries have supplied data, of which 18 supplied data electronically. Serotypes with unusual increases over the same period in 1999 are shown in figure one. The table on page two details the top fifteen serotypes identified in Western Europe for the second quarter of 2000. The total number of human salmonella isolates reported this quarter are 25,187 with 20,925 (83.1%) being *S.enteritidis*, *S.typhimurium*, *S.hadar* or *S.virchow*.

**Quarterly data - major trends.**

Details below refer to the 18 countries that have supplied comparable data electronically for 1999 and 2000. The total number of reports in the database show a decrease over the same period 1999 from 29,183 to 25,187, a fall of 13.7%. All the top four serotypes have decreased in comparison to isolates in the 2nd quarter of 1999, *S.enteritidis* (16,691 isolates in the 2<sup>nd</sup> quarter of 2000, 66.3% of the total) by 12.3%, *S.typhimurium* (3,377, 13.4%) by 25.5%, *S.hadar* (450, 1.8%) by 17.7% and *S.virchow* (407, 1.6%) by 16.4%. Ten serotypes were identified more than 100 times during the quarter; *S.infantis* (347, 1.4%), *S.brandenburg* (179, 0.7%) *S.saintpaul* (174, 0.7%) *S.heidelberg* (133, 0.4%), *S.derby* (118, 0.5%), *S.newport* (118, 0.5%), *S.agona* (116, 0.5%), *S.typhi* (113, 0.5%), *S.stanley* (106, 0.4), *S.bovismorbificans* (104, 0.4%).

Thirteen other serotypes were isolated between 50 and 99 times; *S.montevideo*, *S.blockley*, *S.muenchen*, *S.anatum*, *S.braenderup*, *S.paratyphi A*, *S.java*, *S.thompson*, *S.oranienburg*, *S.paratyphi B*, *S.panama*, *S.bredeney*, *S.livingstone*. These serotypes constituted a total of 829 isolates, 3.3% of the total. Forty serotypes were reported between 10 and 49 times totaling 988, 3.9% of the total and 152 serotypes were reported less than 10 times, 399, 1.6% Five hundred and thirty-eight isolates, 2.1%, have not been fully serotyped at time of report.

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All data are provisional

Scientific Secretary: **Ian Fisher**  
Administrator: **Francine Ryan**

PHLS Communicable Disease Surveillance Centre  
61 Colindale Ave, London NW9 5EQ, UK  
Ph: +44-208-200-6868 Fax: +44-208-200-7868  
Email: Enter-net @phls.org.uk

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Participants

**Austria**

Dr Franz Allerberger  
Dr Helga Halbich-Zankl  
Dr Werner Thiel

**Belgium**

Dr Ingrid Wybo  
Dr Denis Pierard  
Dr Frank Van Look

**Denmark**

Dr Kåre Mølbak  
Dr Peter Gerner-Smidt

**England & Wales**

Dr Sarah O'Brien  
Dr John Threlfall  
Mrs Linda Ward

**Finland**

Dr Petri Ruutu  
Dr Anja Siitonen

**France**

Dr Jean-Claude Desenclos  
Prof Patrick Grimont

**Germany**

Dr Andrea Ammon  
Prof Helge Karch  
Dr Helmut Tschäpe

**Greece**

Prof Jenny Kremastinou  
Prof Nicholas Legakis  
Ms Lia Tzala

**Ireland**

Dr Martin Cormican  
Dr Dirval Igoe

**Italy**

Dr Alfredo Caprioli  
Dr Ida Luzzi  
Dr Alberto Tozzi

**Luxembourg**

Dr Pierrette Huberty-Krau  
Dr François Schneider

**Netherlands**

Dr Yvonne van Duynhoven  
Dr Wim Wannet

**Norway**

Dr Viggo Hasseltvedt  
Dr Jørgen Lassen

**Portugal**

Dr Jorge Machado  
Dr Teresa Paixão

**Scotland**

Dr John Coia  
Dr John Cowden  
Dr Giles Edwards

**Spain**

Dr Gloria Hernández Pezzi  
Dr Miquel Usera

**Sweden**

Dr Yvonne Andersson  
Dr Sven Löfdahl  
Dr Ralf Wollin

**Switzerland**

Dr André Burnens  
Dr Hans Schmid

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**Enter-net Salmonella database –  
Top 15 serotypes reported in Q2 2000 (Q2 1999)**

<b>Serotype</b>	<b>Freq</b>	<b>%</b>
Enteritidis	16,691	66.3
	(19,029)	(65.2)
Typhimurium	3,377	13.4
	(4,534)	(15.5)
Hadar	450	1.8
	(547)	(1.9)
Virchow	407	1.6
	(487)	(1.7)
Infantis	347	1.4
	(274)	(0.9)
Brandenburg	179	0.7
	(141)	(0.5)
Saintpaul	174	0.7
	(144)	(0.5)
Heidelberg	133	0.5
	(153)	(0.5)
Derby	118	0.5
	(101)	(0.3)
Newport	118	0.5
	(138)	(0.5)
Agona	116	0.5
	(100)	(0.3)
Typhi	113	0.4
	(127)	(0.4)
Stanley	106	0.4
	(113)	(0.4)
Bovismorbificans	104	0.4
	(112)	(0.4)
Montevideo	94	0.4
	(84)	(0.3)
Other	2,660	10.5
	(3,099)	(10.6)
<b>Total</b>	<b>25,187</b>	<b>100</b>
	<b>(29,183)</b>	<b>(100)</b>

**Descriptive epidemiology of serotypes with unusual increases quarter 2, 2000, compared with quarter 2, 1999.**

*S.kedougou*; no cases were travel associated. Details of the 21 cases show that there were 15 males, three females and three not stated; four aged 0-11m, seven 1-5y, eight 15-64y and two aged 65+.

*S.haifa*; eight of the 21 cases for whom details are available are associated with travel, Egypt five, Malta one and Pakistan two.

*S.paratyphi* B; Fifty-five cases are included in the Enter-net salmonella database, and only three state travel (India two and Thailand one). There are 16 males, 20 females, and 19 not known; one is aged 0-11m, 15 1-5y, three 6-14y, 22 15-64y, nine 65y+ and five not known.

*S.albany*; nine of the 18 cases were travel associated, India two and Thailand seven.

*S.emek*; 15 of the 25 cases reported travel association, predominantly the Far East.

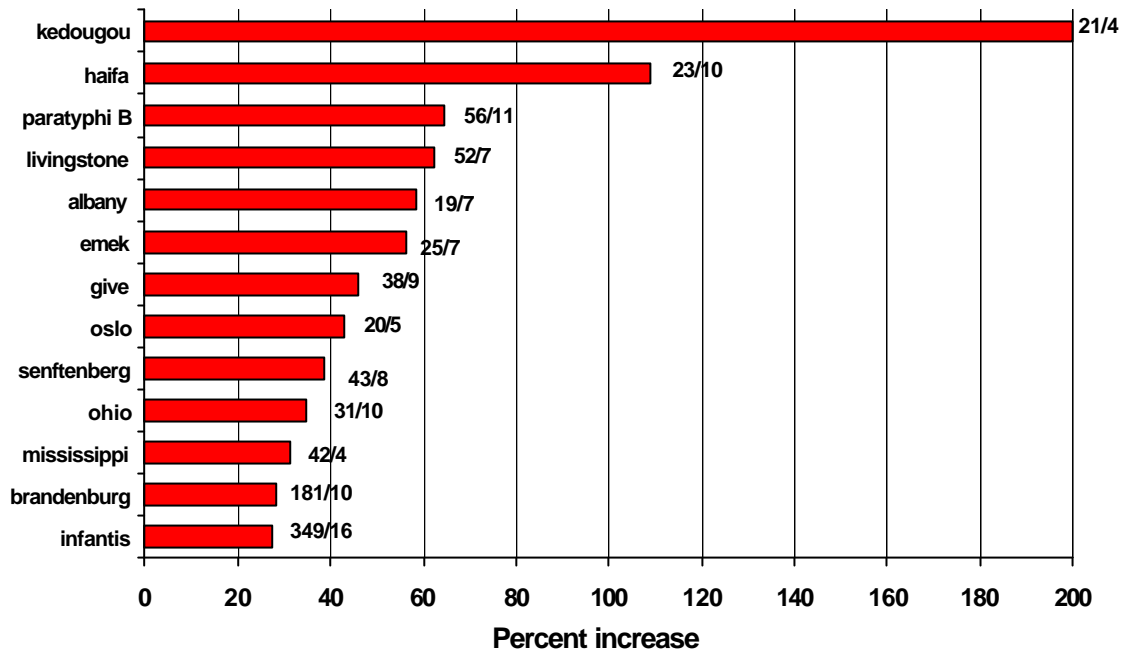
*S.give*; Three of the 37 cases in the database were associated with travel (Ghana one, Sweden two). There were 13 males, 20 females and 4 not known. Two were aged 0-11m, three 1-5y, one 6-14y, 20 15-64y and 11 65y+.

*S.senftenberg*; Five cases were travel associated, with nine males, 21 females and 13 not stated. There were seven aged 0-11m, four 1-5y, two 6-14y, 26 15-64y, three 65y+, and one not known.

*S.ohio*; Three cases were associated with travel (Egypt, Haiti and India one each). There were 14 males, 12 females and five not stated. Six were aged 0-11m, three 1-5y, one 6-14y, 15 15-64y, three 65y+, and two not stated.

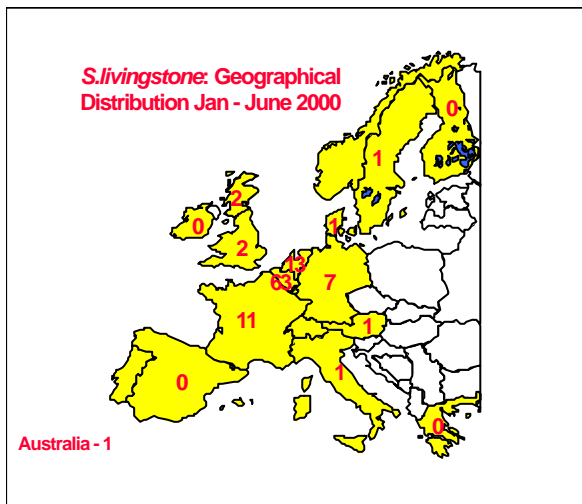
*S.brandenburg*; Two cases were travel associated, France and Tunisia. There were 78 males, 70 females and 31 not stated. Eighteen were aged 0-11m, 66 1-5y, 15 6-14y, 44 15-64y, 23 65y+, and 13 not stated.

**Serotypes with unusual increases this quarter, and number of countries reporting - figure 1.**



*S. mississippi*; Two cases were associated with travel to India and Vanuatu. There were 17 males, 23 females and one not stated. One was aged 0-11m, eight 1-5y, four 6-14y, 22 15-64y, and six 65y+.

*S. infantis*; 14 cases are travel associated. There were 114 males, 193 females, and 40 not stated. Seventeen were aged 0-11m, 33 1-5y, 13 6-14y, 128 15-64y, 145 65y+, and 11 not stated.



*S. livingstone*; Fifty-one cases are included in the Enter-net salmonella database, and only one states travel, to Algeria. The remaining cases are 22 males, 15 females and 13 not stated. Three were aged 0-11m, 10 1-5y, 6 6-14y, 18 15-64y, eight 65y+, and six not stated. This serotype was also highlighted in the report for the first quarter of 2000. A review of non-travel associated cases for the first six months show that there were 103 cases to end June 2000, cf 68 in the same period in 1999, an increase of 51%. There were 50 males (34 in 1999), 37

females (22), with 16 not stated (12). Nine (8.7% of the total) were aged 0-11m (four, 5.9%), 30 (29.1%) 1-5y (18, 26.5%), 10 (9.7%) 6-14y (6, 8.8%), 31 (30.1%) 15-64y (27, 39.7%), 16 (15.5%) 65y+ (nine, 13.2%) and seven (6.8%) not stated (four, 5.9%).