

Chapter 2.4

REPORTS OF *SALMONELLA* IN DEER, HORSES AND RABBITS

Results from statutory reports of *Salmonella* for deer, horses (mules and donkeys are non-statutory species) and rabbits are presented in this chapter. In 2002 *Salmonella* was isolated from horses (Table 38) but was not reported in rabbits (Table 40) or deer (Table 37). Deer and rabbits are commercially reared for human consumption in Great Britain.

296,240 horses and 33,640 farmed deer were recorded by the 2002 Livestock Census. The numbers of diagnostic submissions reported to the VIDA database from horses (including mules and donkeys), deer and rabbits were lower in 2002 (977, 83 and 139, respectively) than in 2000 (1262, 97 and 188, respectively) (VIDA 2002).

There were slightly more *Salmonella* incidents reported in horses in 2002 (35) than in 2001 (30). *Salmonella* isolates came from samples taken to diagnose clinical disease (22 incidents), an investigation made under the Zoonoses Order (1 incident), surveillance activity (2 incidents) and the reason for sampling was not known for 10 other incidents (Table 1, Chapter 1). Samples related to the 35 *Salmonella* incidents came from 6 farms, 6 veterinary hospitals, 2 riding stables and 21 unknown types of premises. As in previous years, more than half of the incidents were *S. Typhimurium*. All definitive types of this serotype have been isolated previously in the last 5 years and DT104 continues to be the most common type (6 of 22 incidents). There were four incidents of *S. Enteritidis* due to PT1b (1 incident), PT4 (2 incidents) and PT6 (1 incident) (see Table 38).

S. Coeln (last isolated in cattle in 1997) and *S. Durham* (last isolated in cattle in 2000) were reported for the first time in horses. *S. Anatum*, which was reported last year for the first time in horses since 1992, was isolated again this year. There were three incidents of *S. Newport* but none with MDRSN (see Chapter 2.1). Several serotypes found in horses including *S. Typhimurium* are potential zoonotic pathogens.

Table 37: *Salmonella* in deer on all premises

<i>Salmonella</i> Incidents (Isolations)	1998	1999	2000	2001*	2002
ENTERICA ENTERICA					
Goldcoast	- (-)	1 (1)	- (-)	- (-)	- (-)
TOTAL	- (-)	1 (1)	- (-)	- (-)	- (-)

* 2001 data may not be comparable due to impact of FMD outbreak

Table 38: *Salmonella* in horses on all premises

<i>Salmonella</i> Incidents (Isolations)	1998	1999	2000	2001*	2002
ENTERICA ENTERICA					
Agama	1 (1)	4 (5)	3 (13)	2 (2)	2 (3)
Agona	- (-)	- (-)	- (-)	1 (1)	- (-)
Ajiobo	- (-)	- (-)	1 (1)	- (-)	1 (1)
Anatum	- (-)	- (-)	- (-)	1 (1)	1 (1)
Bredeney	3 (4)	- (-)	- (-)	- (-)	- (-)
Coeln	- (-)	- (-)	- (-)	- (-)	1 (1)
Derby	- (-)	- (-)	3 (4)	- (-)	- (-)
Dublin	2 (2)	- (-)	1 (1)	- (-)	- (-)
Durham	- (-)	- (-)	- (-)	- (-)	1 (1)
Enteritidis	13 (13)	6 (7)	5 (5)	- (-)	4 (6)
Fresno	- (-)	1 (1)	- (-)	- (-)	- (-)
Give	- (-)	- (-)	- (-)	1 (1)	- (-)
Goldcoast	- (-)	- (-)	1 (1)	- (-)	- (-)
Heidelberg	- (-)	- (-)	1 (1)	1 (1)	- (-)
Indiana	1 (1)	1 (1)	- (-)	- (-)	- (-)
Javiana	- (-)	- (-)	- (-)	1 (1)	- (-)
Kottbus	1 (1)	- (-)	- (-)	- (-)	- (-)
Larochelle	- (-)	- (-)	- (-)	1 (1)	- (-)
Mbandaka	- (-)	- (-)	1 (1)	- (-)	- (-)
Montevideo	- (-)	- (-)	- (-)	1 (2)	- (-)
Newington	- (-)	- (-)	1 (1)	- (-)	- (-)
Newport	2 (2)	- (-)	- (-)	2 (2)	3 (3)
Rissen	- (-)	1 (1)	- (-)	- (-)	- (-)
Stourbridge	- (-)	1 (1)	- (-)	- (-)	- (-)
Tennessee	- (-)	- (-)	- (-)	1 (1)	- (-)
Thompson	1 (1)	- (-)	3 (3)	- (-)	- (-)
Typhimurium	41 (51)	18 (26)	34 (35)	17 (24)	22 (22)
ENTERICA DIARIZONAE					
61:k:1,5,7	1 (1)	- (-)	- (-)	- (-)	- (-)
unspecified "arizona" +	1 (2)	- (-)	- (-)	- (-)	- (-)

Table 38: *Salmonella* in horses on all premises

<i>Salmonella</i> Incidents (Isolations)	1998	1999	2000	2001*	2002
UNSPECIFIED					
untypeable	- (-)	1 (1)	- (-)	- (-)	- (-)
structure only	1 (1)	- (-)	- (-)	1 (1)	- (-)
rough strain	- (-)	1 (1)	- (-)	- (-)	- (-)
Untyped	- (-)	- (-)	1 (1)	- (-)	- (-)
TOTAL	68 (80)	34 (44)	55 (67)	30 (38)	35 (38)

* 2001 data may not be comparable due to impact of FMD outbreak

+ antigenic structure not stated

Table 39: S. Typhimurium in horses on all premises

Definitive Types Incidents (Isolations)	1998	1999	2000	2001*	2002
1	1 (1)	- (-)	1 (1)	1 (1)	1 (1)
8	1 (1)	- (-)	1 (1)	- (-)	- (-)
12	2 (3)	1 (2)	- (-)	- (-)	1 (1)
40	2 (2)	2 (2)	3 (3)	1 (1)	1 (1)
41	3 (4)	1 (1)	2 (2)	2 (3)	1 (1)
46	1 (1)	- (-)	- (-)	- (-)	- (-)
49	1 (1)	- (-)	- (-)	- (-)	- (-)
49b	- (-)	2 (4)	3 (3)	- (-)	- (-)
56	- (-)	- (-)	6 (6)	1 (1)	1 (1)
99	1 (1)	- (-)	- (-)	- (-)	- (-)
104	15 (17)	9 (14)	8 (8)	4 (9)	6 (6)
104b	3 (7)	1 (1)	1 (1)	3 (4)	1 (1)
135	1 (1)	- (-)	- (-)	- (-)	- (-)
160	1 (1)	- (-)	- (-)	- (-)	- (-)
193	2 (3)	1 (1)	1 (1)	- (-)	2 (2)
193a	- (-)	- (-)	1 (1)	- (-)	- (-)
195	- (-)	- (-)	1 (1)	- (-)	- (-)
204a	1 (1)	- (-)	- (-)	- (-)	- (-)
U302	- (-)	- (-)	1 (1)	1 (1)	2 (2)
U308	- (-)	- (-)	1 (1)	- (-)	- (-)
U308a	- (-)	- (-)	2 (3)	- (-)	1 (1)
U310	- (-)	- (-)	- (-)	1 (1)	- (-)
RDNC	1 (1)	1 (1)	1 (1)	1 (1)	4 (4)
NOPT	2 (3)	- (-)	- (-)	2 (2)	- (-)
Untyped	3 (3)	- (-)	1 (1)	- (-)	1 (1)
TOTAL	41 (51)	18 (26)	34 (35)	17 (24)	22 (22)

* 2001 data may not be comparable due to impact of FMD outbreak

Table 40: *Salmonella* in rabbits on all premises

Salmonella Incidents (Isolations)	1998	1999	2000	2001*	2002
ENTERICA ENTERICA					
Enteritidis	- (-)	1 (1)	1 (1)	- (-)	- (-)
Manhattan	1 (1)	- (-)	- (-)	- (-)	- (-)
Typhimurium	- (-)	1 (1)	- (-)	- (-)	- (-)
TOTAL	1 (1)	2 (2)	1 (1)	- (-)	- (-)

* 2001 data may not be comparable due to impact of FMD outbreak