

Chapter 3

REPORTS OF *SALMONELLA* IN LIVESTOCK PRODUCTS

This chapter contains, as in previous years, information on reports of *Salmonella* from animal products. Isolations of *Salmonella* have been collated and presented in Tables 67 and 68 when isolated from the following products:

- Live animals sampled at slaughterhouse.
- Animal carcasses and parts of carcasses sampled at a slaughterhouse.
- Human foodstuffs of animal origin sampled at a premises other than a slaughterhouse.

There have been no isolations of *S. Enteritidis* reported from animal products since 2001. There was a single isolation of *S. Typhimurium* (DT104) from a bovine carcass in 2004 and no other reports of *S. Typhimurium*.

National abattoir survey

In a one year survey of a statistically derived sample of cattle, sheep and pigs at slaughter in Great Britain, which commenced on the 20th of January 2003, *Salmonella* was found in 1g samples of rectal contents from thirty-six cattle (1.4%) and thirty sheep (1.1%), while *Salmonella* was isolated from 10g caecal contents from one hundred and twenty-four pigs (23.4%). For cattle, the prevalence varied by season from 0.82% in winter to 2.43% in the summer months. Autumn had the lowest percentage of isolates for sheep (0.5%) with spring having the highest (2.0%). In pigs, seasonal prevalence varied from 20.0% in spring to 25.2% in autumn. The most commonly isolated serotypes from cattle were *S. Typhimurium*, *S. Mbandaka* and *S. Dublin*, while *Salmonella enterica* subspecies *diarizonae* serovar 61:k:1,5,7 and *S. Dublin* were most commonly isolated from sheep. In pigs *S. Typhimurium* and *S. Derby* were the most commonly isolated serotypes (Table 69). Within *S. Typhimurium*, definitive types DT104 and 193 were commonly isolated from pigs. There was a significant increase in the prevalence of *Salmonella* in cattle and sheep, but no significant change in pigs found in the 2003 abattoir survey in comparison with the 1999/2000 survey.

Table 67: *Salmonella* from slaughterhouses and human food premises

<i>Salmonella</i> serotype	Isolations 2002				Isolations 2003				Isolations 2004			
	Cattle	Sheep	Pigs	Poultry	Cattle	Sheep	Pigs	Poultry	Cattle	Sheep	Pigs	Poultry
Dublin	-	-	-	-	-	-	-	-	2	-	-	-
Derby	-	-	1	-	-	-	1	-	-	-	-	-
Kedougou	-	-	1	-	-	-	-	-	-	-	-	-
Livingstone	-	-	-	-	-	-	-	-	-	-	-	1
Montevideo	-	-	-	-	-	-	-	-	-	4	-	-
Newport	-	-	-	-	-	-	-	1	-	-	-	-
Ohio	-	-	-	-	-	-	-	1	-	-	-	-
Stanley	-	-	-	-	-	-	-	1	-	-	-	-
Senftenberg	-	-	-	-	-	-	-	-	-	-	-	1
Typhimurium	-	-	2	-	1	-	4	-	1	-	-	-
Structure only	-	-	-	-	-	-	-	2	-	-	-	-
TOTAL	-	-	4	-	1	-	5	5	3	4	-	2

Table 68: *Salmonella* Typhimurium from slaughterhouses and human food premises

Definitive Type	Isolations 2002				Isolations 2003				Isolations 2004			
	Cattle	Sheep	Pigs	Poultry	Cattle	Sheep	Pigs	Poultry	Cattle	Sheep	Pigs	Poultry
12	-	-	1	-	-	-	-	-	-	-	-	-
104	-	-	-	-	1	-	2	-	1	-	-	-
U308	-	-	1	-	-	-	-	-	-	-	-	-
untyped	-	-	-	-	-	-	2	-	-	-	-	-
TOTAL	-	-	2	-	1	-	4	-	1	-	-	-

Table 69: Prevalence of *Salmonella* in cattle, sheep and pigs at slaughter in GB, 2003

	Cattle ^a		Sheep ^a		Pigs ^b	
	N	% positive	N	% positive	N	% positive
<i>Salmonella</i> spp.	2554	1.4	2825	1.1	529	23.4
<i>S. Typhimurium</i>	-	0.4	-	0.04	-	12.7
<i>S. Derby</i>	-	0.2	-	0.07	-	5.9
<i>S. Mbandaka</i>	-	0.4	-	0.04	-	0.0
<i>S. Dublin</i>	-	0.3	-	0.14	-	0.0
61:k:1,5,7	-	0.0	-	0.46	-	0.0
Other serotypes	-	0.1	-	0.35	-	4.8

N number tested

a systematic samples proportional to slaughter throughput were collected from 93 participating abattoirs (cattle: 63%, sheep: 58% of national throughput) from January 2003 for a period of 12 months
Maximum of 4 animals sampled on each occasion.
Individual sample collection: ligated rectum.

b systematic samples proportional to slaughter throughput were collected from 93 participating abattoirs (86 % national throughput) from January 2003 for for a period of 12 months

Maximum of 4 pigs sampled on each occasion.
Individual sample collection: ligated caecum