

Chapter 1

REASON FOR SAMPLING AND PLACE OF SAMPLING

Only some of the isolations of *Salmonella* reported to Defra have been responsible for outbreaks of clinical disease in livestock (53% in 2002). This is in contrast to data reported for *Salmonella* in humans, reports of which usually correlate with incidents of clinical disease. This chapter gives the reason why samples were taken and the place from which they originated (Tables 1, 2, 3 and 4). Most of the incidents reported in chicken flocks are the result of statutory monitoring or surveillance activities; 94% in 2002. From 1993 to 1999 there was a marked increase in the proportion of incidents resulting from non-statutory surveillance of chickens, mainly broiler flocks, and a corresponding reduction in incidents reported as a result of statutory monitoring. Therefore, it is likely that there has been an increased total level of monitoring of chicken flocks for *Salmonella* during this period as the level of statutory monitoring has been maintained. 86% of the *Salmonella* reports in chickens were as a result of voluntary monitoring of broiler flocks. *Salmonella* surveillance is also a common practice in the turkey and duck industries. In contrast, the majority of *Salmonella* incidents reported from other species are the result of examinations carried out to diagnose clinical disease.

Tables 3 and 4 report incidents and isolations of *Salmonella* in relation to the place where the samples were taken. The majority of incidents reported result from samples taken on the farm (90%). However, 10% of incidents in chickens result from samples taken at hatcheries which are one of the locations at which samples are taken under the Poultry Breeding Flocks and Hatcheries Order (PBFHO) 1993. There were no reports of *Salmonella* from human food-stuffs of animal origin sampled at premises other than a slaughterhouse in 2002.

Table 1: Reason for sampling in 2002 - samples taken from farms and premises other than slaughterhouses

Species	Number of incidents by reason for sampling					TOTAL	% ALL
	PB	ZO	ND	NS	NK		
Cattle	na	12	948	33	11	1004	35.4
Sheep	na	-	185	17	1	203	7.2
Goats	na	-	1	-	-	1	0.04
Pigs	na	13	146	29	15	203	7.2
Rabbits	na	-	-	-	-	-	
Horses	na	1	22	2	10	35	1.2
Deer	na	-	-	-	-	-	
Chickens	19	1	49	799	1	869	30.7
Turkeys	-	-	37	85	1	123	4.3
Ducks	-	-	16	218	2	236	8.3
Geese	na	-	1	-	-	1	0.04
Guinea Fowl	na	-	1	-	-	1	0.04
Partridges	na	-	3	3	1	7	0.2
Pheasants	na	-	19	8	1	28	1.0
Pigeons	na	-	15	4	1	20	0.7
Quail	na	-	-	-	-	-	
Non-statutory	na	1	68	30	3	102	3.6
Total	19	28	1511	1228	47	2833	
% ALL	0.7	1.0	53.3	43.3	1.7		

Key:

- PB Poultry Breeding Flocks and Hatcheries Order 1993 (voluntary for breeding flocks of turkeys and ducks)
- ZO Investigation made under the Zoonoses Order 1989
- ND Diagnosis of clinical disease
- NS Surveillance activity
- NK Not known
- na not applicable

Table 2: Reason for sampling in 2002 - samples taken from slaughterhouses or human food premises

Species	Number of isolations by reason for sampling		
	ND	NS	TOTAL
Cattle	-	-	-
Sheep	-	-	-
Goats	-	-	-
Pigs	-	4	4
Rabbits	-	-	-
Horses	-	-	-
Deer	-	-	-
Chickens	-	-	-
Turkeys	-	-	-
Ducks	-	-	-
Geese	-	-	-
Guinea Fowl	-	-	-
Partridges	-	-	-
Pheasants	-	-	-
Pigeons	-	-	-
Quail	-	-	-
Total	-	4	4

Key: ND Diagnosis of clinical disease
NS Surveillance activity

Table 3: Place of sampling in 2002 - samples taken from farms and premises other than slaughterhouses

Species	Number of incidents by place sample taken				TOTAL
	FA	HA	OT	NK	
Cattle	978	na	8	18	1004
Sheep	197	na	5	1	203
Goats	1	na	-	-	1
Pigs	187	na	11	5	203
Rabbits	-	na	-	-	-
Horses	7	na	12	16	35
Deer	-	na	-	-	-
Chickens	777	88	4	-	869
Turkeys	119	4	-	-	123
Ducks	231	4	1	-	236
Geese	1	-	-	-	1
Guinea Fowl	1	-	-	-	1
Partridges	6	-	1	-	7
Pheasants	28	-	-	-	28
Pigeons	2	-	14	4	20
Quail	-	-	-	-	-
Non-statutory	16	3	52	31	102
Total	2551	99	108	75	2833

Key: FA Farm
 HA Hatchery
 OT Other
 NK Not known
 na not applicable

Table 4: Place of sampling in 2002 - samples taken at slaughterhouses or human food premises

Species	Number of isolations by place sample taken			
	SA	SP	FP	TOTAL
Cattle	-	-	-	-
Sheep	-	-	-	-
Goats	-	-	-	-
Pigs	-	4	-	4
Rabbits	-	-	-	-
Horses	-	-	-	-
Deer	-	-	-	-
Chickens	-	-	-	-
Turkeys	-	-	-	-
Ducks	-	-	-	-
Geese	-	-	-	-
Guinea Fowl	-	-	-	-
Partridges	-	-	-	-
Pheasants	-	-	-	-
Pigeons	-	-	-	-
Quail	-	-	-	-
Total	-	4	-	4

Key:

SA Live animals sampled at a slaughterhouse

SP Carcases sampled at a slaughterhouse

FP Human food stuffs of animal origin sampled at a premises other than a slaughterhouse