

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 (60% in 2003). 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). The majority of the incidents reported in chicken flocks are the result of statutory monitoring or surveillance activities; 67% in 2003. From 1993 to 1999 there was a marked increase in the proportion of incidents resulting from non-statutory surveillance of chickens, mainly broiler flocks. However since 2000 the proportion of incidents resulting from non-statutory surveillance has decreased, and there has been a corresponding increase in incidents reported as a result of statutory monitoring. *Salmonella* surveillance of healthy flocks is also a common practice in the turkey and duck industries. By 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 (78%). However, 34% 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 ten reports of *Salmonella* from samples taken at slaughterhouses in 2003, but no reports of *Salmonella* from human food-stuffs of animal origin sampled at premises other than a slaughterhouse.

Table 1: Reason for sampling in 2003 - samples taken from farms and premises other than slaughterhouses

Species	Number of incidents by reason for sampling						% ALL
	PB	ZO	ND	NS	NK	TOTAL	
Cattle	na	43	1087	6	36	1172	34.1
Sheep	na	24	255	1	-	280	8.2
Goats	na	-	-	-	-	-	-
Pigs	na	19	163	18	8	208	6.1
Rabbits	na	-	-	-	1	1	0.03
Horses	na	7	19	-	2	28	0.8
Deer	na	-	-	-	-	-	-
Chickens	15	3	230	544	40	832	24.2
Turkeys	-	-	45	258	5	308	9.0
Ducks	-	2	111	237	7	357	10.4
Geese	na	-	-	-	-	-	-
Guinea Fowl	na	-	-	-	-	-	-
Partridges	na	-	-	-	-	-	-
Pheasants	na	4	17	2	-	23	0.7
Pigeons	na	5	12	2	-	19	0.6
Quail	na	-	2	-	-	2	0.05
Non-statutory	na	16	136	30	20	202	5.9
Total	15	123	2077	1098	119	3432	
% ALL	0.4	3.6	60.5	32.0	3.5		

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 2003 - samples taken from slaughterhouses or human food premises

Species	Number of isolations by reason for sampling		
	ND	NS	TOTAL
Cattle	-	-	-
Sheep	-	-	-
Goats	-	-	-
Pigs	5	-	5
Rabbits	-	-	-
Horses	-	-	-
Deer	-	-	-
Chickens	-	5	5
Turkeys	-	-	-
Ducks	-	-	-
Geese	-	-	-
Guinea Fowl	-	-	-
Partridges	-	-	-
Pheasants	-	-	-
Pigeons	-	-	-
Quail	-	-	-
Total	5	5	10

Key: ND Diagnosis of clinical disease
NS Surveillance activity

Table 3: Place of sampling in 2003 - samples taken from farms and premises other than slaughterhouses

Species	Number of incidents by place sample taken				TOTAL
	FA	HA	OT	NK	
Cattle	1103	na	3	66	1172
Sheep	275	na	2	1	280
Goats	-	na	-	-	-
Pigs	195	na	5	5	208
Rabbits	-	na	1	-	1
Horses	13	na	9	-	28
Deer	-	na	-	-	-
Chickens	440	282	12	39	832
Turkeys	276	27	1	-	308
Ducks	334	19	-	3	357
Geese	-	-	-	-	-
Guinea Fowl	-	-	-	-	-
Partridges	-	-	-	-	-
Pheasants	16	-	4	3	23
Pigeons	1	-	16	2	19
Quail	2	-	-	-	2
Non-statutory	23	1	72	60	202
Total	2678	329	125	181	3432

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

Table 4: Place of sampling in 2003 - 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	1	-	5
Rabbits	-	-	-	-
Horses	-	-	-	-
Deer	-	-	-	-
Chickens	3	2	-	5
Turkeys	-	-	-	-
Ducks	-	-	-	-
Geese	-	-	-	-
Guinea Fowl	-	-	-	-
Partridges	-	-	-	-
Pheasants	-	-	-	-
Pigeons	-	-	-	-
Quail	-	-	-	-
Total	7	3	-	10

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