

Chapter 1

REASON FOR SAMPLING AND PLACE OF SAMPLING

Only some of the incidents of *Salmonella* reported to Defra have been responsible for outbreaks of clinical disease in livestock (47% in 2005). 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; 89% in 2005. In 2004 the proportion of incidents in chickens resulting from non-statutory surveillance increased after several years of decline and this increase continued during 2005, 85% of chicken incidents were from non-statutory surveillance. *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 (81%). However during 2005, 31% 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; this is a decrease from 2004 when 37% of chicken incidents were from hatchery samples. There were four reports of *Salmonella* from samples taken at slaughterhouses in 2005 including one from a slaughterhouse environment, but no reports of *Salmonella* from human food-stuffs of animal origin sampled at premises other than a slaughterhouse; however isolation of *Salmonella* from food tends to be reported only on an ad-hoc basis.

Table 1: Reason for sampling in 2005 - 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	57	774	-	-	831	27.8
Sheep	na	7	217	2	-	226	7.5
Goats	na	-	1	-	-	1	0.03
Pigs	na	5	169	9	-	183	6.1
Rabbits	na	-	-	-	-	-	-
Horses	na	2	38	4	-	44	1.5
Deer	na	1	3	-	-	4	0.1
Chickens	22	20	51	538	-	631	21.1
Turkeys	-	7	33	239	-	279	9.3
Ducks	2	-	22	605	-	629	21.0
Geese	na	-	-	-	-	-	-
Guinea Fowl	na	-	-	-	-	-	-
Partridges	na	-	-	-	-	-	-
Pheasants	na	6	10	1	-	17	0.6
Pigeons	na	5	4	6	-	15	0.5
Quail	na	-	-	-	-	-	-
Non-statutory	na	22	81	20	11	134	4.5
Total	24	132	1403	1424	11	2994	
% ALL	0.8	4.4	46.9	47.6	0.4		

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 2005 - samples taken from slaughterhouses or human food premises

Species	Number of isolations by reason for sampling				TOTAL
	ND	NS	ZO	NK	
Cattle	1	-	-	-	1
Sheep	-	-	-	-	-
Goats	-	-	-	-	-
Pigs	-	-	1	-	1
Rabbits	-	-	-	-	-
Horses	-	-	-	-	-
Deer	-	-	-	-	-
Chickens	-	1	-	-	1
Turkeys	-	-	-	-	-
Ducks	-	-	-	-	-
Geese	-	-	-	-	-
Guinea Fowl	-	-	-	-	-
Partridges	-	-	-	-	-
Pheasants	-	-	-	-	-
Pigeons	-	-	-	-	-
Quail	-	-	-	-	-
Non-statutory	-	-	-	1*	1
Total	1	1	1	1	4

* Environmental sampling from abattoir

Key: ND Diagnosis of clinical disease
 NS Surveillance activity
 ZO Investigation made under the Zoonoses Order 1989
 NK Not known

Table 3: Place of sampling in 2005 - samples taken from farms and premises other than slaughterhouses

Species	Number of incidents by place sample taken				TOTAL
	FA	HA	OT	NK	
Cattle	825	na	4	2	831
Sheep	222	na	3	1	226
Goats	1	na	-	-	1
Pigs	179	na	1	3	183
Rabbits	-	na	-	-	-
Horses	13	na	25	6	44
Deer	-	na	4	-	4
Chickens	418	194	14	5	631
Turkeys	247	18	11	3	279
Ducks	298	124	6	1	629
Geese	-	-	-	-	-
Guinea Fowl	-	-	-	-	-
Partridges	-	-	-	-	-
Pheasants	6	-	9	2	17
Pigeons	-	-	13	2	15
Quail	-	-	-	-	-
Non-statutory	13	2	81	38	134
Total	2422	338	171	63	2994

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

Table 4: Place of sampling in 2005 - samples taken at slaughterhouses or human food premises

Species	Number of isolations by place sample taken			
	SA	SP	FP	TOTAL
Cattle	-	1	-	1
Sheep	-	-	-	-
Goats	-	-	-	-
Pigs	-	1	-	1
Rabbits	-	-	-	-
Horses	-	-	-	-
Deer	-	-	-	-
Chickens	1	-	-	1
Turkeys	-	-	-	-
Ducks	-	-	-	-
Geese	-	-	-	-
Guinea Fowl	-	-	-	-
Partridges	-	-	-	-
Pheasants	-	-	-	-
Pigeons	-	-	-	-
Quail	-	-	-	-
Non-statutory	-	1	-	1
Total	1	3	-	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