

Chapter 1

REASON FOR SAMPLING AND PLACE OF SAMPLING

Of the incidents of *Salmonella* reported to Defra only a proportion have been responsible for outbreaks of clinical disease in livestock (59% in 2007). 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 where they originated (Tables 1, 2, 3 and 4). The majority of the incidents reported in chicken flocks are the result of voluntary surveillance activities; 78% in 2007. *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 during 2007 resulted from samples taken on farms (88%). During 2007, 8% of incidents in chickens were reported from samples taken at hatcheries; this is a decrease from 2006 when 18% of chicken incidents were from hatchery samples, reflecting the modified sampling regime undertaken by PBFHO 2007.

There were three reports of *Salmonella* from samples taken at slaughterhouses in 2007 (*S. Derby* from a sheep, *S. Typhimurium* DT193 from a pig and *S. Typhimurium* DT135 from a horse); all were from post-mortems.

Table 1: Reason for sampling in 2007 - 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	29	654	2	-	685	35.3
Sheep	na	10	184	-	-	194	10.0
Goats	na	-	1	-	-	1	0.05
Pigs	na	27	132	6	-	165	8.5
Rabbits	na	-	-	-	-	-	-
Horses	na	7	47	8	-	62	3.2
Deer	na	1	1	-	-	2	0.1
Chickens	18	13	8	153	-	192	9.9
Turkeys	5	1	23	83	-	112	5.8
Ducks	-	4	2	357	-	363	18.7
Geese	na	-	1	-	-	1	0.05
Guinea Fow	na	-	-	-	-	-	-
Partridges	na	-	10	3	-	13	0.7
Pheasants	na	1	13	2	1	17	0.9
Pigeons	na	1	12	5	-	18	0.9
Quail	na	-	-	-	-	-	-
Non-statute	na	23	49	29	16	117	6.0
Total	23	117	1137	648	17	1942	
% ALL	1.2	6.0	58.5	33.4	0.9		

Key: PB Poultry Breeding Flocks and Hatcheries Order 2007 (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

* The definition of an incident can be found in the Introduction

Table 2: Reason for sampling in 2007 - samples taken from slaughterhouses or human food premises

Species	Number of isolations by reason for sampling				TOTAL
	ND	NS	ZO	NK	
Cattle	-	-	-	-	-
Sheep	1	-	-	-	1
Goats	-	-	-	-	-
Pigs	1	-	-	-	1
Rabbits	-	-	-	-	-
Horses	1	-	-	-	1
Deer	-	-	-	-	-
Chickens	-	-	-	-	-
Turkeys	-	-	-	-	-
Ducks	-	-	-	-	-
Geese	-	-	-	-	-
Guinea Fowl	-	-	-	-	-
Partridges	-	-	-	-	-
Pheasants	-	-	-	-	-
Pigeons	-	-	-	-	-
Quail	-	-	-	-	-
Non-statutory	-	-	-	-	-
Total	3	-	-	-	3

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 2007 - samples taken from farms and premises other than slaughterhouses

Species	Number of incidents by place sample taken				TOTAL
	FA	HA	OT	NK	
Cattle	675	na	4	6	685
Sheep	193	na	1	-	194
Goats	1	na	-	-	1
Pigs	162	na	2	1	165
Rabbits	-	na	-	-	-
Horses	26	na	24	12	62
Deer	-	na	2	-	2
Chickens	175	15	1	1	192
Turkeys	102	7	2	1	112
Ducks	359	1	1	2	363
Geese	-	-	-	1	1
Guinea Fowl	-	-	-	-	-
Partridges	9	-	4	-	13
Pheasants	8	1	6	2	17
Pigeons	-	-	18	-	18
Quail	-	-	-	-	-
Non-statutory	8	-	69	40	117
Total	1718	24	134	66	1942

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

Table 4: Place of sampling in 2007 - samples taken at slaughterhouses or human food premises

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

Key: SA Live animals sampled at a slaughterhouse
 SP Carcasses sampled at a slaughterhouse
 FP Human food stuffs of animal origin sampled at a premises other than a slaughterhouse