

Design of the Import Reinspection Scheduled Sampling Plan for Pesticides

I. Selecting and Ranking Candidate Pesticides

The list of compounds of concern for the import reinspection sampling plan (IRSP) is identical to that for the Domestic Scheduled Sampling Plan (Summary Table III). In ranking pesticides for inclusion in the IRSP, FSIS chose to employ the ranking scores generated for the domestic scheduled sampling plan because FSIS does not have sufficient historical data on pesticides in imported products to predict their violation rates. However, if FSIS has reason to believe that a compound is being misused in a foreign country then it would add that compound/country pair to the IRSP.

II. Prioritizing Candidate Pesticides

The list of high priority compounds chosen for the IRSP by the SAT is the same as that for the domestic plan. Once the high-priority compounds and compound classes are identified, FSIS applies other considerations to determine which compounds FSIS should sample. The principal factor was the availability of laboratory resources, especially the availability of appropriate analytical methods within the FSIS laboratories. Only the chlorinated hydrocarbon/chlorinated organophosphate (CHCs/COPs) compound class is included in the 2008 NRP. The compounds that can be identified by this multiresidue method (MRM) are listed in the section, *Design of the Domestic Scheduled Sampling Plan for Pesticides*.

III. Identifying the Compound/Production Class (C/PC) Pairs

As with the domestic scheduled sampling plan, the import reinspection sampling for CHCs and COPs is used as a means of monitoring incidents of accidental and environmental contamination.

IV. Allocation of Sampling Resources

Egg Products

The samples for residue analysis for imported egg products are selected in a different manner than the other product classes. In order to establish a history of compliance with the U.S. requirements for each category for egg products, the first ten shipments from individual foreign establishments are subjected to 100 % reinspection. If the egg product is in compliance, the rate of inspection is reduced to a random selection of one reinspection out of eight product lots from each foreign establishment. This reinspection rate continues as long as the product is in compliance.

Animal Product Classes

Table 7, *Estimated Annual Amount of Product Imported*, lists the estimated amounts of all product classes imported into the U.S. and the percentage of each of the product classes. The percentage of each product class imported annually is calculated using the following equation:

Equation 15

$$\% \text{ Specific Product Class Imported}(P_C) = \frac{\text{Amount of Specific Product Class Imported}}{\text{Total Product Imported}} \times 100$$

The relative sampling priority is obtained by multiplying the percent product class imported (P_C) by the pesticide scores, using the following equation:

Equation 16

$$\text{Relative Sampling Priority} = (P_C) \times \text{Pesticide Score}$$

Based on the scores, one of the following sampling options is chosen: (1) high regulatory concern (300 analyses/year); (2) moderate regulatory concern (230 samples/year); or (3) low regulatory concern (90 samples/year). This is indicated in Table 29, *Number of Pesticide Samples/Product Class*, in the column “Number of Samples.”

In the IRSP, FSIS will not test processed products (1) from foreign countries eligible to ship fresh products to the United States; and (2) from eligible countries in which the source of raw materials is from other foreign countries that are eligible to ship fresh products and are actively exporting to the United States. Processed beef from Australia, Brazil, Canada, Mexico, New Zealand, Uruguay, combination products (varied) and veal from Canada, lamb and meat from Australia, Canada and New Zealand, pork from Canada, Denmark, Mexico and Netherlands, chicken processed and turkey from Canada and Mexico and ducks/geese from Canada and France will not be sampled because the raw materials used are from countries eligible to ship raw products to the U.S.

If a product class represents less than one percent (by weight) of total combined U.S. imports of meat, poultry, and egg products, then the total number of samples analyzed for any compound or compound class is eight times the number of countries from which that product is imported. For example, if veal, fresh is imported from only three countries and the amount imported is 0.10 % relative to total U.S. imports, 24 samples of veal, fresh would be taken for each analysis, eight samples from each country.

The adjusted number of samples is listed in Table 29, *Number of Pesticide Samples/Product Class*, in the column labeled “Adjusted Number of Samples.” The final number of samples for a compound/product class is obtained after the allocation of samples among different countries is completed. The final number of samples is listed in Table 29, in the column labeled “Final Number of Samples.” The numbers in columns labeled “Adjusted Number of Samples” and “Final Number of Samples” may vary slightly because of the rounding upwards or downwards of the samples.

Allocation of Samples among Different Countries

The total number of samples chosen for each compound/product class pair is subdivided among the different countries. The number of samples for each country is based on the relative amount of total product class imported: less than one percent and greater than one percent.

Allocation of Samples in Product Classes where the Total Volume Imported is Less Than One Percent

If the amount of an import product class is less than one percent in a specific country, eight samples per compound/compound class are taken from that country. The relative amounts of veal processed, lamb/mutton processed, goat fresh and processed, turkey fresh and processed, other fowl fresh and processed, varied combination fresh and processed, ratite fresh and guineas/squabs are less than one percent. Also, as stated above, if a country is exporting both fresh and processed products or sources all its raw materials from eligible sources, then no residue samples will be scheduled for the processed products from that country. The numbers of samples per country per product class for each compound/compound class are listed in Tables 30-42.

Allocation of Samples in Product Classes where the Total Volume Imported is Greater than One Percent

For major product classes, the number of samples was allocated to each country depending upon the relative amount of product imported from that country. Table 8, *Estimated Annual Amount of Product Imported/Country*, lists the amount of product imported from each country. The percent of a product class imported from a country was calculated as follows and is in Table 9, *Relative Annual Amount of Product Imported/Country*.

Equation 17

$$\text{Percent Product Class Imported per Country (P}_{C/C}\text{)} = \frac{\text{Amount of Product Class from Country}}{\text{Total Amount of Product Class}} \times 100$$

Based upon the relative amount of product class imported per country, the number of samples that should be taken at the port of entry was calculated using the following formula:

Equation 18

$$\text{Unadjusted Number of Samples per Country (U}_{C/S}\text{)} = \frac{\text{Total Number of Samples} \times (\text{P}_{C/C})}{100}$$

This is indicated in the column labeled “Unadjusted Number of Samples (U_{C/S}),” in Tables 30-42.

After determining the number of samples required from each country, each country with less than eight samples was assigned a minimum of eight samples. This is indicated in the column labeled “Adjustment # 1” in Tables 30-42. The results of this adjustment are in the column labeled “Initial Adj.” If the total number of samples for a compound/product class resulted in more than the total number of samples allocated to that compound/product class pair, then a second adjustment had to be made so that the total number of samples would be within an allocated number. This adjustment was made only to those countries from which greater than eight samples were to be taken. This adjustment is accomplished using the following equation:

Equation 19

$$\text{Number of Samples after Adjustment Number 2} = (\text{U}_{C/S}) - \frac{[\text{N} \times (\text{P}_{C/C})]}{(\text{P}_{T/C})}$$

where,

$$N = (N_1) - (N_T)$$

N₁ = Total Number of Samples after Adjustment #1

N_T = Total Number of Samples Allocated

P_{T/C} = Total Percent of Product Class from the Countries That Had Greater Than Eight Samples

P_{C/C} = Percent Product Class Imported per Country

U_{C/S} = Unadjusted Number of Samples

If a country is exporting both fresh and processed products or sources all of their raw materials from eligible sources, then no residue samples will be processed from that country.

Table 29
Number of Pesticide Samples/Product Class
2008 FSIS NRP, Import Reinspection Sampling Plan

No. of Countries	Product	Pesticide	Pesticide Score	Percent Product	Relative Sampling Priority	Number of Samples	Adjusted Number of Samples	Final Number of Samples
11	Beef fresh	CHCs/COPs	16	56.39	902.27	300	300	300
7	Beef processed	CHCs/COPs	16	6.54	104.70	80	79	79
12	Pork fresh	CHCs/COPs	16	22.68	362.99	230	230	230
12	Pork, processed	CHCs/COPs	16	1.67	26.78	64	64	64
3	Veal, fresh	CHCs/COPs	16	1.72	27.58	0	0	0
1	Veal, processed	CHCs/COPs	16	0.001	0.01	0	0	0
5	Lamb/Mutton, fresh	CHCs/COPs	16	4.68	74.93	113	90	90
3	Lamb/Mutton processed	CHCs/COPs	16	0.01	0.14	0	0	0
2	Goat, fresh	CHCs/COPs	16	0.69	11.06	24	24	24
2	Turkey, fresh	CHCs/COPs	16	0.44	7.06	16	16	16
1	Ratite, fresh	CHCs/COPs	16	0.01	0.13	0	0	0
2	Chicken, fresh	CHCs/COPs	16	1.83	29.22	16	16	16
3	Chicken, processed	CHCs/COPs	16	2.31	36.89	8	8	8
3	Turkey, processed	CHCs/COPs	16	0.34	5.46	8	8	8
2	Other fowl, fresh	CHCs/COPs	16	0.13	2.13	16	16	16
2	Other fowl, processed	CHCs/COPs	16	0.003	0.04	0	0	0
1	Varied combination, fresh	CHCs/COPs	16	0.001	0.02	8	8	8
3	Varied combination, processed	CHCs/COPs	16	0.54	8.59	16	16	16
1	Guinea/Squab	CHCs/COPs	16	4.8E-08	0.00	0	0	0
	Total			100.00%		899	875	875

Table 30
Number of Samples/Product Class – Pork Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Final Adj
Belgium	1.45	1	8	8
Canada	0.86	1	0	0 ¹
Croatia	0.86	1	8	8
Denmark	30.00	27	0	0 ¹
France	0.01	0	8	8
Germany	1.82	2	8	8
Hungary	2.12	2	8	8
Italy	13.00	12	8	8
Mexico	18.00	16	0	0 ¹
Netherlands	3.00	3	0	0 ¹
Poland	27.00	24	8	8
Spain	2.70	2	8	8
Total	100	91	64	64

Table 31
Number of Samples /Product Class - Goat, Fresh
2008 Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Final Adj
Australia	96.7	8		8
Mexico	0.2	8		8
New Zealand	3.1	8		8
Total	100	24		24

Table 32
Number of Samples /Product Class – Turkey, Fresh
2008 Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Final Adj
Canada	99.999	8		8
Mexico	0.001	8		8
Total	100	16		16

Table 33
Number of Samples /Product Class – Turkey Processed
2008 Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Final Adj
Canada	44.55	8		0 ¹
Israel	1.13	8		8
Mexico	54.32	8		0 ¹
Total	100	24		8

Table 34
Number of Samples/Product Class – Other Fowl, Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

CHCs/COPs	%Product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust # 1	Final Adj
Canada	96	8	8	8
France	4	8	8	8
Total	100	16	16	16

Table 35
Number of Samples /Product Class – Chicken, Fresh
2008 Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Final Adj
Canada	99.98	8		8
Mexico	0.018	8		8
Total	100	16		16

Table 36
Number of Samples /Product Class – Varied Combination, Fresh
2008 FSIS NRP Import Reinspection Sampling Plan

CHCs/COPs	%Product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust # 1 (8/country)	Final Adj
Canada	100	8	8	8

Table 37
Number of Samples /Product Class - Varied Combination, Processed
2008 FSIS NRP, Import Monitoring Plan

CHCs/COPs	%Product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust # 1	Final Adj
Australia	0.07	8	8	8
Canada	74	8	0	0 ¹
Mexico	25.9	8	8	8
Total	99.97	32	24	16

Table 38
Number of Samples/Product Class - Beef, Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=300*(Pc/c)/100	Adjust #1	Initial Adj	Adjust # 2	Final Adj
Australia	32	96	0	96	82	82
Brazil	0.001	0.003	8	8	8	8
Canada	32	96	0	96	82	82
Chile	0.001	0.003	8	8	8	8
Costa Rica	0.7	2.1	8	8	8	8
Honduras	0.04	0.12	8	8	8	8
Japan	0.001	0.003	8	8	8	8
Mexico	1.5	4.5	8	8	8	8
New Zealand	19	57	0	57	49	49
Nicaragua	2.6	7.8	8	8	8	8
Uruguay	12	36	0	36	31	31
Total	100	300	56	341	300	300

Table 39
Number of Samples/Product Class - Beef, Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Initial Adj	Adjust # 2	Final Adj
Argentina	19.8	27	0	27	26	26
Australia	1.22	1.098	8	8	0	0 ¹
Brazil	61.15	55.035	0	0	53	53
Canada	9.33	8.397	0	0	0	0 ¹
Mexico	2.5	2.25	8	8	0	0 ¹
New Zealand	1.23	1.107	8	8	0	0 ¹
Uruguay	4.8	4.32	8	0	0	0 ¹
Total	100.03	72.207	32	51	80	79

Table 40
Number of Samples/Product Class – Pork, Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=230*(Pc/c)/100	Adjust #1	Initial Adj	Adjust # 2	Final Adj
Australia	0.01	0.023	1	8	8	8
Canada	87	200	200	200	135	135
Chile	0.1	0.23	1	8	8	8
Denmark	10	23	21	21	15	15
Finland	0.3	0.69	1	8	8	8
Ireland	0.5	1.15	1	8	8	8
Mexico	0.37	0.851	1	8	8	8
Netherlands	3	6.9	1	8	8	8
N. Ireland	0.22	0.506	1	8	8	8
New Zealand	0.01	0.023	1	8	8	8
Sweden	0.1	0.23	1	8	8	8
United Kingdom	0.16	0.368	1	8	8	8
Total	100	230	231	301	230	230

Table 41
Number of Samples /Product Class - Lamb/Mutton, Fresh
2008 FSIS NRP, Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Initial Adj	Adjust # 2	Final Adj
Australia	73.5	66.15	66	66	43	43
Canada	0.24	0.216	0	8	8	8
Chile	0.004	0.0036	0	8	8	8
Iceland	0.1	0.09	0	8	8	8
Mexico	0.01	0.009	0	8	8	8
New Zealand	26.2	23.58	23	23	15	15
Total	100	90.0486	89	121	90	90

Table 42
Number of Samples/Product Class - Chicken, Processed
2008 FSIS NRP, Import Reinspection Sampling Plan

CHCs/COPs	%product (Pc/c)	Uc/s=90*(Pc/c)/100	Adjust #1	Initial Adj	Adjust # 2	Final Adj
Canada	83.7	75.33	8	0	0	0 ¹
Israel	0.42	0.378	8	8	8	8
Mexico	16	14.4	8	0	0	0 ¹
Total	100	90	24	8	8	8

¹ There will be no sampling of processed products from countries that also ship fresh products to the United States or source their raw material from other foreign countries that are eligible to ship fresh product and are actually exporting to United States

Scheduled Sampling Plans for Environmental and Processing Contaminants

The candidate environmental and processing contaminants of concern selected by members of the SAT were as follows:

A. Environmental Contaminants

- Heavy metals
- Mycotoxins

B. Processing Contaminants

- Nitrosamines
- Maillard reaction products (from charring)
- Compounds migrating from packaging
- Polyaromatic hydrocarbons
- Breakdown products of oils used in deep frying

Heavy metals were identified by the SAT as meriting inclusion in the NRP. FSIS will conduct an exploratory assessment of the heavy metals, lead and cadmium in the production class, “beef cows.” An exploratory assessment sampling for lead and cadmium began in 2003 (October through December; heifers and dairy cows) and continued through 2004 (boars and stags, dairy cows, heifers, and mature chickens), 2005 for steers, 2006 for mature chickens and 2007 for mature turkeys. Sampling for 2008 is summarized in Table 45.

No processing contaminants have been designated for analysis in year 2008.

Even if a contaminant is not scheduled for inclusion in the FSIS NRP, should a contamination incident occur during the year, FSIS can initiate residue sampling as part of an exploratory assessment plan.

**Table 43
Number of Samples/Product Class for Lead and Cadmium
2008 FSIS NRP Domestic Specifically Designed Survey**

Production Class	Compound	Number of Samples
Beef cows	Lead	300
Beef cows	Cadmium	300
Total		600

Sampling Plan for Exploratory Assessments

Bob Veal Antibiotic Retained (BOVAR)

Bob veal antibiotic retained (BOVAR) is a scheduled sampling exploratory assessment that is reactive to the unacceptable antibiotic violation rate obtained from previous scheduled sampling exposure assessments for bob veal calves. There are two purposes for BOVAR. The first is to determine what effect condemning antibiotic violative bob veal calf carcasses will have on the violation rate of the scheduled sampling for antibiotics in bob veal calves. The hypothesis is that BOVAR will reduce the antibiotic violation rate in scheduled sampling of bob veal calves. Further analysis will be necessary to verify that Establishment Hazard Analysis and Critical Control Point (HACCP) Plans are in control. The second purpose of BOVAR is to initiate hold and test in bob veal calves to assess the implementation. BOVAR was initiated in the 2007 NRP and will continue in the 2008 NRP.

Table 44
2008 FSIS NRP Exploratory Domestic Assessments for Bob Veal Antibiotic Retained (BOVAR)

<i>Compound or Compound Class</i>	<i>Production Class</i>	<i>Number of Samples</i>
Antibiotics	Bob veal calves	90
Total	Total Samples	90

Summary of Domestic and Import Sampling Plans

Domestic Sampling Plan

The number of scheduled samples for veterinary drugs, environmental contaminants and pesticides in all production classes is listed in Table 45, *Domestic Sampling Plan: Summary I, 2008 FSIS NRP, Domestic Scheduled Sampling and Exploratory Assessments*. The table also specifies, for each combination of compound and production class, which FSIS laboratory will be conducting the analyses and the sampling plan type. For the convenience of the reader, this information is also presented in summary form (including all sampling numbers, but not including the laboratory and sampling plan designation), in Table 46, *Detailed Sampling Plan: Summary II, 2008 FSIS NRP, Domestic Sampling and Exploratory Assessments*.

Import Sampling Plan

The final detailed import plan sample numbers for all compounds (veterinary drugs, pesticides and unavoidable contaminants), in all production classes and all countries, are listed in Table 47, *Summary, 2008 FSIS NRP, Import Monitoring Plan*. A summary of the total number of samples per compound per production class is presented in Table 48, *Number of Compounds/Product Class, 2008 FSIS NRP, Import Monitoring Plan*. In Table 49, *Number of Samples/Country/Product Class, 2008 FSIS NRP, Import Monitoring Plan*, the number of samples per country per production class is listed. A summary of all sampling plans (domestic and import) is provided in Table 50, *Combined Summary, 2008 FSIS NRP, Domestic and Import Sampling Plans and Exploratory Assessment*.

Table 45
Domestic Sampling Plan: Summary I
2008 FSIS NRP, Domestic Scheduled Sampling and Exploratory Assessments

Analysis	Lab	Production Class	Number of Samples	Plan Type
Antibiotics by Bioassay	ML	Boars/stags	300	Scheduled Sampling
Antibiotics by Bioassay	ML	Bob veal	230	Scheduled Sampling
Antibiotics by Bioassay	ML	Bulls	300	Scheduled Sampling
Antibiotics by Bioassay	ML	Dairy cows	230	Scheduled Sampling
Antibiotics by Bioassay	ML	Ducks	45	Scheduled Sampling
Antibiotics by Bioassay	ML	Formula-fed veal	300	Scheduled Sampling
Antibiotics by Bioassay	ML	Goats	90	Scheduled Sampling
Antibiotics by Bioassay	ML	Heavy calves	95	Scheduled Sampling
Antibiotics by Bioassay	ML	Heifers	300	Scheduled Sampling
Antibiotics by Bioassay	ML	Lambs	230	Scheduled Sampling
Antibiotics by Bioassay	ML	Market hogs	300	Scheduled Sampling
Antibiotics by Bioassay	ML	Mature chickens	300	Scheduled Sampling
Antibiotics by Bioassay	ML	Mature sheep	60	Scheduled Sampling
Antibiotics by Bioassay	ML	Mature turkeys	300	Scheduled Sampling
Antibiotics by Bioassay	ML	Non-Formula-fed veal	90	Scheduled Sampling
Antibiotics by Bioassay	ML	Rabbits	45	Scheduled Sampling
Antibiotics by Bioassay	ML	Roaster pigs	300	Scheduled Sampling
Antibiotics by Bioassay	ML	Sows	230	Scheduled Sampling
Antibiotics by Bioassay	ML	Steers	300	Scheduled Sampling
Total Antibiotics by Bioassay			4,045	
Arsenicals	EL	Beef cows	300	Scheduled Sampling
Arsenicals	EL	Egg products	300	Scheduled Sampling
Arsenicals	EL	Mature turkeys	300	Scheduled Sampling
Total Arsenicals			900	
Avermectins	EL	Boars/stags	300	Scheduled Sampling
Avermectins	EL	Bulls	300	Scheduled Sampling
Avermectins	EL	Goats	230	Scheduled Sampling
Avermectins	EL	Heavy calves	135	Scheduled Sampling
Avermectins	EL	Lambs	300	Scheduled Sampling
Avermectins	EL	Mature sheep	230	Scheduled Sampling
Avermectins	EL	Non-Formula-fed veal	90	Scheduled Sampling
Avermectins	EL	Rabbits	45	Scheduled Sampling
Avermectins	EL	Roaster pigs	300	Scheduled Sampling
Avermectins	EL	Sows	300	Scheduled Sampling
Total Avermectins			2,230	

Table 45 (continued)
Domestic Sampling Plan: Summary I
2008 FSIS NRP, Domestic Scheduled Sampling and Exploratory Assessments

Analysis	Lab	Production Class	Number of Samples	Plan Type
<i>beta</i> -Agonists	WL	Goats	230	Scheduled Sampling
<i>beta</i> -Agonists	WL	Market hogs	300	Scheduled Sampling
<i>beta</i> -Agonists	WL	Non-Formula-fed veal	90	Scheduled Sampling
Total <i>beta</i>-Agonists¹			620	
Bob Veal Antibiotic Retained	ML	Bob veal	90	Exploratory Assessment
Carbadox	WL	Market hogs	300	Scheduled Sampling
Carbadox	WL	Roaster pigs	300	Scheduled Sampling
Total Carbadox			600	
Chloramphenicol	EL	Bob veal	300	Scheduled Sampling
Chloramphenicol	EL	Heifers	300	Scheduled Sampling
Chloramphenicol	EL	Mature chickens	300	Scheduled Sampling
Chloramphenicol	EL	Mature turkeys	300	Scheduled Sampling
Chloramphenicol	EL	Steers	300	Scheduled Sampling
Total Chloramphenicol			1,500	
CHCs/COPs	WL	Beef cows	300	Scheduled Sampling
CHCs/COPs	WL	Boars/stags	230	Scheduled Sampling
CHCs/COPs	WL	Dairy cows	300	Scheduled Sampling
CHCs/COPs	WL	Goats	230	Scheduled Sampling
CHCs/COPs	WL	Heavy calves	135	Scheduled Sampling
CHCs/COPs	WL	Heifers	300	Scheduled Sampling
CHCs/COPs	WL	Lambs	300	Scheduled Sampling
CHCs/COPs	WL	Mature sheep	230	Scheduled Sampling
CHCs/COPs	WL	Sows	230	Scheduled Sampling
Total CHCs/COPs			2,255	
Florfenicol	EL	Beef cows	230	Scheduled Sampling
Florfenicol	EL	Boars/stags	0	Not scheduled
Florfenicol	EL	Bulls	0	Not scheduled
Florfenicol	EL	Dairy cows	0	Not scheduled
Florfenicol	EL	Mature chickens	230	Scheduled Sampling
Florfenicol	EL	Non-formula-fed veal	90	Scheduled Sampling
Florfenicol	EL	Sows	0	Not scheduled
Florfenicol	EL	Young chickens	0	Not scheduled
Total Florfenicol			550	

Table 45 (continued)
Domestic Sampling Plan: Summary I
2008 FSIS NRP, Domestic Scheduled Sampling and Exploratory Assessments

Analysis	Lab	Production Class	Number of Samples	Plan Type
Flunixin	ML	Beef cows	0	Not Scheduled
Flunixin	ML	Bulls	90	Scheduled Sampling
Flunixin	ML	Dairy cows	90	Scheduled Sampling
Flunixin	ML	Heavy calves	0	Not Scheduled
Total Flunixin			180	
Lead, Cadmium, and Arsenic	EL	Beef cows	300	Exploratory Assessment
Total Lead, Cadmium, and Arsenic			300	
Melengestrol Acetate (MGA)	WL	Heifers	300	Scheduled Sampling
Total MGA			300	
Nitrofurans	WL	Dairy cows	230	Scheduled Sampling
Nitrofurans	WL	Market hogs	300	Scheduled Sampling
Nitrofurans	WL	Sows	300	Scheduled Sampling
Total Nitrofurans			830	
Nitroimidazoles	EL	Young chickens	300	Scheduled Sampling
Total Nitroimidazoles			300	
Sulfonamides	EL	Bob veal	230	Scheduled Sampling
Sulfonamides	EL	Dairy cows	230	Scheduled Sampling
Sulfonamides	EL	Egg products	300	Scheduled Sampling
Sulfonamides	EL	Goats	230	Scheduled Sampling
Sulfonamides	EL	Heavy calves	135	Scheduled Sampling
Sulfonamides	EL	Heifers	300	Scheduled Sampling
Sulfonamides	EL	Market hogs	230	Scheduled Sampling
Sulfonamides	EL	Mature chickens	300	Scheduled Sampling
Sulfonamides	EL	Non-formula-fed veal	90	Scheduled Sampling
Sulfonamides	EL	Roaster pigs	230	Scheduled Sampling
Sulfonamides	EL	Sows	300	Scheduled Sampling
Sulfonamides	EL	Steers	230	Scheduled Sampling
Sulfonamides	EL	Young chickens	300	Scheduled Sampling
Total Sulfonamides			3,105	
Thyreostats	EL	Beef cows	300	Scheduled Sampling
Total Thyreostats			300	
Xenobiotic hormones	ML	Formula-fed veal	90	Scheduled Sampling
Xenobiotic hormones	ML	Non-formula-fed veal	90	Scheduled Sampling
Total Xenobiotic hormones²			180	

¹ beta-Agonists: Ractopamine, Zilpaterol, Cimaterol, Salbutamol, and Clenbuterol

² Xenobiotic hormones: Trenbolone and Zeranol

Key:

CHCs = Chlorinated hydrocarbons

COPs = Chlorinated organophosphates

EL = FSIS Eastern Laboratory, Athens, GA

ML = FSIS Midwestern Laboratory, St. Louis, MO

WL = FSIS Western Laboratory, Alameda, CA

Note: FAST samples will be screened for Phenylbutazone and Flunixin as part of inspector generated sampling plan

Table 46
Domestic Sampling Plan: Summary II
2008 FSIS NRP, Domestic Scheduled Sampling and Exploratory Assessments

Production Class	Antibiotics	Arsenicals	Avermectins	β-Agonists	Carbadox	CHCs/COPs
Bulls	300	0	300	0	0	0
Beef cows	0	300	0	0	0	300
Dairy cows	230	0	0	0	0	300
Heifers	300	0	0	0	0	300
Steers	300	0	0	0	0	0
Bob veal	230	0	0	0	0	0
Formula-fed veal	300	0	0	0	0	0
Non-Formula-fed veal	90	0	90	90	0	0
Heavy calves	95	0	135	0	0	135
Subtotal, Cattle	1,935	300	525	90	0	1,035
Market hogs	300	0	0	300	300	0
Roaster pigs	300	0	300	0	300	0
Boars/Stags	300	0	300	0	0	230
Sows	230	0	300	0	0	230
Subtotal, Swine	1,130	0	900	300	600	460
Mature sheep	60	0	230	0	0	230
Lambs	230	0	300	0	0	300
Goats	90	0	230	230	0	230
Subtotal, Ovine	380	0	760	230	0	760
Total, All Livestock	3,445	300	2,185	620	600	2,255
Young chickens	0	0	0	0	0	0
Mature chickens	300	0	0	0	0	0
Young turkeys	0	0	0	0	0	0
Mature turkeys	300	300	0	0	0	0
Ducks	45	0	0	0	0	0
Geese	0	0	0	0	0	0
Subtotal, Poultry	645	300	0	0	0	0
Rabbits	45	0	45	0	0	0
Egg products	0	300	0	0	0	0
Total, All Production Classes	4,135	900	2,230	620	600	2,255

Table 46 (continued)
Domestic Sampling Plan: Summary II
2008 FSIS NRP, Domestic Scheduled Sampling and Exploratory Assessments

Production Class	Chloramphenicol	Florfenicol	Flunixin	Lead and Cadmium
Bulls	0	0	90	0
Beef cows	0	230	0	300
Dairy cows	0	0	90	0
Heifers	300	0	0	0
Steers	300	0	0	0
Bob veal	300	0	0	0
Formula-fed veal	0	0	0	0
non-Formula-fed veal	0	90	0	0
Heavy calves	0	0	0	0
Subtotal, Cattle	900	320	180	300
Market hogs	0	0	0	0
Roaster pigs	0	0	0	0
Boars/Stags	0	0	0	0
Sows	0	0	0	0
Subtotal, Swine	0	0	0	0
Goats	0	0	0	0
Mature sheep	0	0	0	0
Lambs	0	0	0	0
Subtotal, Ovine	0	0	0	0
Total, All Livestock	900	320	180	300
Young chickens	0	0	0	0
Mature chickens	300	230	0	0
Young turkeys	0	0	0	0
Mature turkeys	300	0	0	0
Ducks	0	0	0	0
Geese	0	0	0	0
Subtotal, Poultry	600	230	0	0
Rabbits	0	0	0	0
Egg products	0	0	0	0
Total, All Production Classes	1,500	550	180	300

Table 46 (continued)
Domestic Sampling Plan: Summary II
2008 FSIS NRP, Domestic Scheduled Sampling and Exploratory Assessments

Production Class	Melengesterol acetate (MGA)	Nitrofurans	Nitroimidazoles	Sulfonamides
Bulls	0	0	0	0
Beef cows	0	0	0	0
Dairy cows	0	230	0	230
Heifers	300	0	0	300
Steers	0	0	0	230
Bob veal	0	0	0	230
Formula-fed veal	0	0	0	0
non-Formula-fed veal	0	0	0	90
Heavy calves	0	0	0	135
Subtotal, Cattle	300	230	0	1,215
Market hogs	0	300	0	230
Roaster pigs	0	0	0	230
Boars/Stags	0	0	0	0
Sows	0	300	0	300
Subtotal, Swine	0	600	0	760
Mature sheep	0	0	0	0
Lambs	0	0	0	0
Goats	0	0	0	230
Subtotal, Ovine	0	0	0	230
Total, All Livestock	300	830	0	2,205
Young chickens	0	0	300	300
Mature chickens	0	0	0	300
Young turkeys	0	0	0	0
Mature turkeys	0	0	0	0
Ducks	0	0	0	0
Geese	0	0	0	0
Subtotal, Poultry	0	0	300	600
Rabbits	0	0	0	0
Egg products	0	0	0	300
Total, All Production Classes	300	830	300	3,105

Table 46 (continued)
Domestic Sampling Plan: Summary II
2008 FSIS NRP, Domestic Scheduled Sampling and Exploratory Assessments

Production Class	Thyreostats	Trenbolone	Zeranol
Bulls	0	0	0
Beef cows	300	0	0
Dairy cows	0	0	0
Heifers	0	0	0
Steers	0	0	0
Bob veal	0	0	0
Formula-fed veal	0	90	90
non-Formula-fed veal	0	90	90
Heavy calves	0	0	0
Subtotal, Cattle	300	180	180
Market hogs	0	0	0
Roaster pigs	0	0	0
Boars/Stags	0	0	0
Sows	0	0	0
Subtotal, Swine	0	0	0
Mature sheep	0	0	0
Lambs	0	0	0
Goats	0	0	0
Subtotal, Ovine	0	0	0
Total, All Livestock	300	180	180
Young chickens	0	0	0
Mature chickens	0	0	0
Young turkeys	0	0	0
Mature turkeys	0	0	0
Ducks	0	0	0
Geese	0	0	0
Subtotal, Poultry	0	0	0
Rabbits	0	0	0
Egg products	0	0	0
Total, All Production Classes	300	180	180

Table 47
Number of Samples/Product Class
2008 FSIS, NRP, Import Reinspection Sampling Plan

Belgium	Pork Processed	Sulfonamides	8
Canada	Pork Processed	Sulfonamides	0
Croatia	Pork Processed	Sulfonamides	8
Denmark	Pork Processed	Sulfonamides	0
France	Pork Processed	Sulfonamides	8
Germany	Pork Processed	Sulfonamides	8
Hungary	Pork Processed	Sulfonamides	8
Italy	Pork Processed	Sulfonamides	8
Mexico	Pork Processed	Sulfonamides	0
Netherlands	Pork Processed	Sulfonamides	0
Poland	Pork Processed	Sulfonamides	8
Spain	Pork Processed	Sulfonamides	8
Australia	Goat Fresh	Avermectins	8
Mexico	Goat Fresh	Avermectins	8
New Zealand	Goat Fresh	Avermectins	8
Canada	Turkeys Fresh	Antibiotics	8
Mexico	Turkeys Fresh	Antibiotics	8
Canada	Turkeys Fresh	Sulfonamides	8
Mexico	Turkeys Fresh	Sulfonamides	8
Canada	Turkeys Fresh	Chloramphenicol	8
Mexico	Turkeys Fresh	Chloramphenicol	8
Canada	Turkeys Fresh	Arsenicals	8
Mexico	Turkeys Fresh	Arsenicals	8
Israel	Turkey Processed	Arsenicals	8
Israel	Turkey Processed	Sulfonamides	8
Canada	Chicken fresh	Antibiotics	8
Mexico	Chicken fresh	Antibiotics	8
Canada	Chicken fresh	Arsenicals	8
Mexico	Chicken fresh	Arsenicals	8
Canada	Chicken fresh	Chloramphenicol	8
Mexico	Chicken fresh	Chloramphenicol	8
Canada	Chicken fresh	Nitroimidazole	8
Mexico	Chicken fresh	Nitroimidazole	8
Canada	Varied combination Fresh	Antibiotics	8
Canada	Varied combination Fresh	Sulfonamides	8
Australia	Varied combination Processed	Sulfonamides	8
Canada	Varied combination Processed	Sulfonamides	0
Mexico	Varied combination Processed	Sulfonamides	8
New Zealand	Varied combination Processed	Sulfonamides	0
Australia	Beef Fresh	Antibiotics	82
Brazil	Beef Fresh	Antibiotics	8
Canada	Beef Fresh	Antibiotics	82
Chile	Beef Fresh	Antibiotics	8
Costa Rica	Beef Fresh	Antibiotics	8
Honduras	Beef Fresh	Antibiotics	8
Japan	Beef Fresh	Antibiotics	8
Mexico	Beef Fresh	Antibiotics	8
New Zealand	Beef Fresh	Antibiotics	49
Nicaragua	Beef Fresh	Antibiotics	8
Uruguay	Beef Fresh	Antibiotics	31

Table 47 (continued)
Number of Samples/Product Class-Pork, Processed
2008 FSIS, NRP, Import Reinspection Sampling Plan

Australia	Beef Fresh	Sulfonamides	82
Brazil	Beef Fresh	Sulfonamides	8
Canada	Beef Fresh	Sulfonamides	82
Chile	Beef Fresh	Sulfonamides	8
Costa Rica	Beef Fresh	Sulfonamides	8
Honduras	Beef Fresh	Sulfonamides	8
Japan	Beef Fresh	Sulfonamides	8
Mexico	Beef Fresh	Sulfonamides	8
New Zealand	Beef Fresh	Sulfonamides	49
Nicaragua	Beef Fresh	Sulfonamides	8
Uruguay	Beef Fresh	Sulfonamides	31
Canada	Horse Fresh	Sulfonamides	8
Australia	Beef Fresh	Avermectins	82
Brazil	Beef Fresh	Avermectins	8
Canada	Beef Fresh	Avermectins	82
Chile	Beef Fresh	Avermectins	8
Costa Rica	Beef Fresh	Avermectins	8
Honduras	Beef Fresh	Avermectins	8
Japan	Beef Fresh	Avermectins	8
Mexico	Beef Fresh	Avermectins	8
New Zealand	Beef Fresh	Avermectins	49
Nicaragua	Beef Fresh	Avermectins	8
Uruguay	Beef Fresh	Avermectins	31
Australia	Beef Fresh	Chloramphenicol	12
Brazil	Beef Fresh	Chloramphenicol	8
Canada	Beef Fresh	Chloramphenicol	12
Chile	Beef Fresh	Chloramphenicol	8
Costa Rica	Beef Fresh	Chloramphenicol	8
Honduras	Beef Fresh	Chloramphenicol	8
Japan	Beef Fresh	Chloramphenicol	8
Mexico	Beef Fresh	Chloramphenicol	8
New Zealand	Beef Fresh	Chloramphenicol	8
Nicaragua	Beef Fresh	Chloramphenicol	8
Uruguay	Beef Fresh	Chloramphenicol	8
Australia	Beef Fresh	Florofenicol	8
Brazil	Beef Fresh	Florofenicol	8
Canada	Beef Fresh	Florofenicol	8
Chile	Beef Fresh	Florofenicol	8
Costa Rica	Beef Fresh	Florofenicol	8
Honduras	Beef Fresh	Florofenicol	8
Japan	Beef Fresh	Florofenicol	8
Mexico	Beef Fresh	Florofenicol	8
New Zealand	Beef Fresh	Florofenicol	8
Nicaragua	Beef Fresh	Florofenicol	8
Uruguay	Beef Fresh	Florofenicol	8
Australia	Beef Fresh	Fluixin	8
Brazil	Beef Fresh	Fluixin	8
Canada	Beef Fresh	Fluixin	8
Chile	Beef Fresh	Fluixin	8

Table 47 (continued)
Number of Samples/Product Class-Pork, Processed
2008 FSIS, NRP, Import Reinspection Sampling Plan

Costa Rica	Beef Fresh	Fluixin	8
Honduras	Beef Fresh	Fluixin	8
Japan	Beef Fresh	Fluixin	8
Mexico	Beef Fresh	Fluixin	8
New Zealand	Beef Fresh	Fluixin	8
Nicaragua	Beef Fresh	Fluixin	8
Uruguay	Beef Fresh	Fluixin	8
Argentina	Beef Processed	Sulfonamides	20
Brazil	Beef Processed	Sulfonamides	40
Argentina	Beef Processed	Avermectins	20
Brazil	Beef Processed	Avermectins	40
Australia	Pork Fresh	Antibiotics	8
Canada	Pork Fresh	Antibiotics	8
Chile	Pork Fresh	Antibiotics	8
Denmark	Pork Fresh	Antibiotics	8
Finland	Pork Fresh	Antibiotics	8
Ireland	Pork Fresh	Antibiotics	8
Mexico	Pork Fresh	Antibiotics	8
Netherlands	Pork Fresh	Antibiotics	8
N. Ireland	Pork Fresh	Antibiotics	8
New Zealand	Pork Fresh	Antibiotics	8
Sweden	Pork Fresh	Antibiotics	8
United Kingdom	Pork Fresh	Antibiotics	8
Australia	Pork Fresh	Arsenicals	8
Canada	Pork Fresh	Arsenicals	8
Chile	Pork Fresh	Arsenicals	8
Denmark	Pork Fresh	Arsenicals	8
Finland	Pork Fresh	Arsenicals	8
Ireland	Pork Fresh	Arsenicals	8
Mexico	Pork Fresh	Arsenicals	8
Netherlands	Pork Fresh	Arsenicals	8
N. Ireland	Pork Fresh	Arsenicals	8
New Zealand	Pork Fresh	Arsenicals	8
Sweden	Pork Fresh	Arsenicals	8
United Kingdom	Pork Fresh	Arsenicals	8
Australia	Pork Fresh	B-agonist	8
Canada	Pork Fresh	B-agonist	135
Chile	Pork Fresh	B-agonist	8
Denmark	Pork Fresh	B-agonist	15
Finland	Pork Fresh	B-agonist	8
Ireland	Pork Fresh	B-agonist	8
Mexico	Pork Fresh	B-agonist	8
Netherlands	Pork Fresh	B-agonist	8
N. Ireland	Pork Fresh	B-agonist	8
New Zealand	Pork Fresh	B-agonist	8
Sweden	Pork Fresh	B-agonist	8
United Kingdom	Pork Fresh	B-agonist	8
Australia	Pork Fresh	Sulfonamides	8
Canada	Pork Fresh	Sulfonamides	135
Chile	Pork Fresh	Sulfonamides	8

Table 47 (continued)
Number of Samples/Product Class-Pork, Processed
2008 FSIS, NRP, Import Reinspection Sampling Plan

Denmark	Pork Fresh	Sulfonamides	15
Finland	Pork Fresh	Sulfonamides	8
Ireland	Pork Fresh	Sulfonamides	8
Mexico	Pork Fresh	Sulfonamides	8
Netherlands	Pork Fresh	Sulfonamides	8
N. Ireland	Pork Fresh	Sulfonamides	8
New Zealand	Pork Fresh	Sulfonamides	8
Sweden	Pork Fresh	Sulfonamides	8
United Kingdom	Pork Fresh	Sulfonamides	8
Australia	Veal Fresh	Antibiotics	13
Canada	Veal Fresh	Antibiotics	38
New Zealand	Veal Fresh	Antibiotics	39
Australia	Veal Fresh	Avermectins	13
Canada	Veal Fresh	Avermectins	38
New Zealand	Veal Fresh	Avermectins	39
Australia	Veal Fresh	B-agonist	13
Canada	Veal Fresh	B-agonist	38
New Zealand	Veal Fresh	B-agonist	39
Australia	Veal Fresh	Sulfonamides	13
Canada	Veal Fresh	Sulfonamides	38
New Zealand	Veal Fresh	Sulfonamides	39
Australia	Veal Fresh	Thyreostats	13
Canada	Veal Fresh	Thyreostats	38
New Zealand	Veal Fresh	Thyreostats	39
Australia	Veal Fresh	Zeranol	13
Canada	Veal Fresh	Zeranol	38
New Zealand	Veal Fresh	Zeranol	39
Australia	Veal Fresh	Chloramphenicol	13
Canada	Veal Fresh	Chloramphenicol	38
New Zealand	Veal Fresh	Chloramphenicol	39
Australia	Mutton/Lamb Fresh	Avermectins	43
Canada	Mutton/Lamb Fresh	Avermectins	8
Chile	Mutton/Lamb Fresh	Avermectins	8
Iceland	Mutton/Lamb Fresh	Avermectins	8
Mexico	Mutton/Lamb Fresh	Avermectins	8
New Zealand	Mutton/Lamb Fresh	Avermectins	15
Israel	Chicken Processed	Arsenicals	8
Canada	Other Fowl Fresh	Antibiotics	8
France	Other Fowl Fresh	Antibiotics	8
Canada	Horse Fresh	Antibiotics	8
Belgium	Pork Processed	CHC/COP	8
Canada	Pork Processed	CHC/COP	0
Croatia	Pork Processed	CHC/COP	8
Denmark	Pork Processed	CHC/COP	0
France	Pork Processed	CHC/COP	8
Germany	Pork Processed	CHC/COP	8
Hungary	Pork Processed	CHC/COP	8
Italy	Pork Processed	CHC/COP	8
Mexico	Pork Processed	CHC/COP	0
Netherlands	Pork Processed	CHC/COP	0

Table 47 (continued)
Number of Samples/Product Class-Pork, Processed
2008 FSIS, NRP, Import Reinspection Sampling Plan

Poland	Pork Processed	CHC/COP	8
Spain	Pork Processed	CHC/COP	8
Australia	Goat Fresh	CHC/COP	8
Mexico	Goat Fresh	CHC/COP	8
New Zealand	Goat Fresh	CHC/COP	8
Canada	Turkey Fresh	CHC/COP	8
Mexico	Turkey Fresh	CHC/COP	8
Canada	Turkey Processed	CHC/COP	0
Israel	Turkey Processed	CHC/COP	8
Mexico	Turkey Processed	CHC/COP	0
Canada	Chicken Fresh	CHC/COP	8
Mexico	Chicken Fresh	CHC/COP	8
Canada	Varied combination fresh	CHC/COP	8
Australia	Varied combination Processed	CHC/COP	8
Canada	Varied combination Processed	CHC/COP	0
Mexico	Varied combination Processed	CHC/COP	8
New Zealand	Varied combination Processed	CHC/COP	0
Australia	Beef fresh	CHC/COP	82
Brazil	Beef fresh	CHC/COP	8
Canada	Beef fresh	CHC/COP	82
Chile	Beef fresh	CHC/COP	8
Costa Rica	Beef fresh	CHC/COP	8
Honduras	Beef fresh	CHC/COP	8
Japan	Beef fresh	CHC/COP	8
Mexico	Beef fresh	CHC/COP	8
New Zealand	Beef fresh	CHC/COP	49
Nicaragua	Beef fresh	CHC/COP	8
Uruguay	Beef fresh	CHC/COP	31
Argentina	Beef Processed	CHC/COP	26
Australia	Beef Processed	CHC/COP	0
Brazil	Beef Processed	CHC/COP	53
Canada	Beef Processed	CHC/COP	0
Mexico	Beef Processed	CHC/COP	0
New Zealand	Beef Processed	CHC/COP	0
Uruguay	Beef Processed	CHC/COP	0
Australia	Pork Fresh	CHC/COP	8
Canada	Pork Fresh	CHC/COP	135
Chile	Pork Fresh	CHC/COP	8
Denmark	Pork Fresh	CHC/COP	15
Finland	Pork Fresh	CHC/COP	8
Ireland	Pork Fresh	CHC/COP	8
Mexico	Pork Fresh	CHC/COP	8
Netherlands	Pork Fresh	CHC/COP	8
N. Ireland	Pork Fresh	CHC/COP	8
New Zealand	Pork Fresh	CHC/COP	8
Sweden	Pork Fresh	CHC/COP	8
United Kingdom	Pork Fresh	CHC/COP	8
Australia	Mutton/Lamb Fresh	CHC/COP	43
Canada	Mutton/Lamb Fresh	CHC/COP	8
Chile	Mutton/Lamb Fresh	CHC/COP	8

Table 47(*continued*)
Number of Samples/Product Class-Pork, Processed
2008 FSIS, NRP, Import Reinspection Sampling Plan

Iceland	Mutton/Lamb Fresh	CHC/COP	8
Mexico	Mutton/Lamb Fresh	CHC/COP	8
New Zealand	Mutton/Lamb Fresh	CHC/COP	15
Canada	Chicken Processed	CHC/COP	0
Israel	Chicken Processed	CHC/COP	8
Mexico	Chicken Processed	CHC/COP	0
Canada	Other Fowl Fresh	CHC/COP	8
France	Other Fowl Fresh	CHC/COP	8
Total			3843

Table 48
Number of Compounds/Production Class
2008 FSIS NRP, Import Reinspection Sampling Plan

Compound	AB	AVM	AS	CHM	FLOR	FLNX	B-A	THY	NTM	SLF	ZRNL	CHCs/ COPs	Total
Beef, fresh	300	300		96	88	88				300		300	1472
Beef, processed		60								60		79	199
Horse, fresh	8									8			16
Pork, fresh	230		96				96			230		230	882
Pork, processed										64		64	128
Veal, fresh	90	90		90			90	90		90	90		630
Lamb/Mutton, fresh		90										82	172
Goat, fresh		24										24	48
Turkey , fresh	16		16	16						16		16	80
Chicken, fresh	16		16	16					16			16	80
Chicken, processed			8									8	16
Other fowl, fresh	16											16	32
Turkey, processed			8							8		8	24
Varied combination, fresh	8									8		8	24
Varied combination, processed										24		16	40
Total/country	684	564	144	218	88	88	186	90	16	808	90	867	3843

AB=Antibiotics; AVM=Avermectins, AS=Arsenicals; CHM=Chloramphenicol; FLOR=Florfenicol; FLNX=Flunixin
B-A=Beta agonists; THY=Thyreostats; NTM=Nitroimidazoles; SLF=Sulfonamides; ZRNL=Zeranol;
CHCs/COPs =Chlorinated hydrocarbons/Chlorinated organophosphates

Table 49
Number of Samples/Country/Product Class
2008 FSIS NRP, Import Reinspection Sampling Plan

Country	Beef, fresh	Beef, processed	Horse, fresh	Pork, fresh	Pork, processed	Veal, fresh	Lamb/Mutton, fresh	Goat, fresh	Turkey, fresh	Chicken, fresh	Chicken, processed	Other fowl fresh	Turkey, processed	Varied combination, fresh	Varied combination, processed	Total
Argentina		66														66
Australia	356			40		91	86	16							16	605
Belgium					16											16
Brazil	56	133														189
Canada	356		16	421		266	16		40	40		16		24		1195
Chile	56			40			16									112
Costa Rica	56															56
Croatia					16											16
Denmark				61												61
Finland				40												40
France					16							16				32
Germany					16											16
Honduras	56															56
Hungary					16											16
Iceland							16									16
Ireland				40												40
Israel											16		24			40
Italy					16											16
Japan	56															56
Mexico	56			40			8	16	40	40					16	216
Netherlands				40												40
New Zealand	220			40		273	30	8							16	587
Nicaragua	56															56
N. Ireland				40												40
Poland					16											16
Spain					16											16
Sweden				40												40
United Kingdom				40												40
Uruguay	148															148
Total	1472	199	16	882	128	630	172	40	80	80	16	32	24	24	48	3843

Table 50
Combined Summary
2008 FSIS NRP Domestic and Import Scheduled Sampling, and Exploratory Assessments

<i>Lab</i>	<i>Analysis</i>	<i>Number of Scheduled Domestic Samples</i>	<i>Number of Scheduled Imported Samples</i>	<i>Number of Scheduled Samples for Exploratory Assessments</i>	<i>Total Number of Samples</i>	<i>Notes</i>
ML	Antibiotics ¹	4,045	684	90	4,819	<p><i>Domestic Scheduled Sampling:</i> 300, 300, 230, 230, 45, 300, 90, 95, 300, 230, 300, 300, 300, 90, 45, 300, 60, 230, and 300 samples are scheduled for bulls, boars/stags, bob veal, dairy cows, ducks, formula-fed veal, goats, heavy calves, heifers, lambs, market hogs, mature chickens, mature turkeys, non-formula-fed veal, rabbits, roaster pigs, sheep, sows, and steers, respectively.</p> <p><i>Exploratory Assessment:</i> 90 samples are scheduled for bob veal.</p> <p><i>Import Scheduled Sampling:</i> 300, 8, 230, 90, 16, 16, 16 and 8 samples are scheduled for cattle, horse, pigs, chicken, turkey and varied combination fresh, respectively</p>
EL	Arsenicals	900	144	0	1,044	<p><i>Domestic Scheduled Sampling:</i> 300, 300 and 300 samples are scheduled for beef cows, egg products, and mature turkeys, respectively.</p> <p><i>Import Scheduled Sampling:</i> 96, 16, 16, 8, and 8 samples are scheduled for fresh pork, fresh turkey, fresh chicken, processed chicken, and processed turkey, respectively.</p>
EL	Avermectins	2,230	564	0	2,794	<p><i>Domestic Scheduled Sampling:</i> 300, 300, 230, 135, 300, 230, 90, 45, 300, and 300 samples are scheduled for bulls, boars/stags, goats, heavy calves, lambs, mature sheep, non-formula-fed veal, rabbits, roaster pigs, and sows, respectively.</p> <p><i>Import Scheduled Sampling:</i> 300, 60, 90, 90 and 24 samples are scheduled for fresh beef, processed beef, fresh veal, fresh lamb and mutton, and fresh goat, respectively</p>

¹ Aminoglycosides, *beta*-Lactams, Fluoroquinolones, Macrolides, and Tetracyclines.

Table 50 (continued)
Combined Summary
2008 FSIS NRP Domestic and Import Scheduled Sampling, and Exploratory Assessments

<i>Lab</i>	<i>Analysis</i>	<i>Number of Scheduled Domestic Samples</i>	<i>Number of Scheduled Imported Samples</i>	<i>Number of Scheduled Samples for Exploratory Assessments</i>	<i>Total Number of Samples</i>	<i>Notes</i>
WL	beta-Agonists ²	620	186	0	806	<i>Domestic Scheduled Sampling:</i> 230, 300, and 90 samples are scheduled for goats, market hogs, and non-formula fed veal, respectively. <i>Import Scheduled Sampling:</i> 90 and 96 samples are scheduled for fresh veal and pork, respectively.
WL	Carbadox	600	0	0	600	<i>Domestic Scheduled Sampling:</i> 300 and 300 samples are scheduled for market hogs and roaster pigs, respectively. <i>Import Scheduled Sampling:</i> No samples are scheduled for the 2008 NRP
EL	Chloramphenicol	1,500	218	0	1,718	<i>Domestic Scheduled Sampling:</i> 300, 300, 300, 300, and 300 samples are scheduled for bob veal, heifers, mature chickens, mature turkeys, and steers, respectively. <i>Import Scheduled Sampling:</i> 96, 90, 16, and 16 samples are scheduled for fresh beef, veal, turkey, and chicken, respectively.
WL	CHCs/COPs	2,255	875	0	3,130	<i>Domestic Scheduled Sampling:</i> 300, 230, 300, 230, 135, 300, 300, 230, and 230 samples are scheduled for beef cows, boars/stags, dairy cows, goats, heavy calves, heifers, lambs, mature sheep, and sows, respectively. <i>Import Scheduled Sampling:</i> 300, 79, 230, 64, 90, 24, 16, 16, 8, 8, 16, 8, and 16 samples are scheduled fresh beef, processed beef, fresh pork, processed pork, fresh lamb/mutton, fresh goat, fresh turkey, fresh chicken, processed chicken, processed turkey, other fowl fresh, fresh varied combo, processed varied combo, respectively
EL	Florfenicol	550	88	0	638	<i>Domestic Scheduled Sampling:</i> 230, 230, and 90 samples are scheduled for beef cows, mature chickens, and non-formula fed veal, respectively. <i>Import Scheduled Sampling:</i> 88 samples are scheduled for fresh beef. Unavailability of tissue for analysis (Liver)
ML	Flunixin	180	88	0	268	<i>Domestic Scheduled Sampling:</i> 90 and 90 samples are scheduled for bulls and dairy cows, respectively. <i>Import Scheduled Sampling:</i> 88 samples re scheduled for fresh beef. Unavailability of tissue for analysis (Liver)
EL	Lead and	300	0	0	300	<i>Domestic Scheduled Sampling:</i> 300 beef cow samples are scheduled

² Ractopamine, Zilpaterol, Cimaterol, Salbutamol, and Clenbuterol

Table 50 (continued)
Combined Summary
2008 FSIS NRP Domestic and Import Scheduled Sampling, and Exploratory Assessments

<i>Lab</i>	<i>Analysis</i>	<i>Number of Scheduled Domestic Samples</i>	<i>Number of Scheduled Imported Samples</i>	<i>Number of Scheduled Samples for Exploratory Assessments</i>	<i>Total Number of Samples</i>	<i>Notes</i>
	Cadmium					<i>Import Scheduled Sampling:</i> No samples are scheduled for 2008 NRP
WL	Melengestrol Acetate (MGA)	300	0	0	300	<i>Domestic Scheduled Sampling:</i> 300 samples are scheduled for heifers. <i>Import Scheduled Sampling:</i> No samples are scheduled for the 2008 NRP. Unavailability of tissue for analysis (Fat)
WL	Nitrofurans	830	0	0	830	<i>Domestic Scheduled Sampling:</i> 230, 300, and 300 samples are scheduled for dairy cows, market hogs, and sows, respectively. <i>Import Scheduled Sampling:</i> No samples are scheduled for the 2008 NRP. Unavailability of tissue for analysis (Liver)
EL	Nitroimidazoles	300	16	0	316	<i>Domestic Scheduled Sampling:</i> 300 samples are scheduled for young chickens. <i>Import Scheduled Sampling:</i> 16 samples are scheduled for fresh chicken
EL	Sulfonamides	3,105	800	0	3,905	<i>Domestic Scheduled Sampling:</i> 230, 230, 300, 230, 135, 300, 230, 300, 90, 230, 300, 230, and 300 samples are scheduled for bob veal, dairy cows, egg products, goats, heavy calves, heifers, market hogs, mature chickens, non-formula-fed veal, roaster pigs, sows, steers, and young chickens, respectively. <i>Import Scheduled Sampling:</i> 300, 60, 8, 230, 64, 16, 8, 8, 16, and 90 are scheduled for fresh beef, processed beef, fresh horse, fresh pork, processed pork, fresh turkey, processed turkey, fresh varied combo, processed varied combo, and fresh veal, respectively.
EL	Thyreostats	300	90	0	390	<i>Domestic Scheduled Sampling:</i> 300 samples are scheduled for beef cows. <i>Import Scheduled Sampling:</i> 90 samples are scheduled for veal fresh
ML	Xenobiotic hormones ³	180	90	0	270	<i>Domestic Scheduled Sampling:</i> 90 and 90 samples are scheduled for formula-fed veal and non-formula-fed veal, respectively. <i>Import Scheduled Sampling:</i> 90 veal samples are scheduled for zeranol only
Total		18,195	3,843	90	22,128	

³ Zeranol and Trenbolone

Table 50 (continued)
Combined Summary
2008 FSIS NRP Domestic and Import Scheduled Sampling, and Exploratory Assessments

Key:

CHC = Chlorinated hydrocarbon;

COP = Chlorinated organophosphate

EL = FSIS Eastern Laboratory, Athens, GA

ML = FSIS Midwestern Laboratory, St. Louis, MO

WL = FSIS Western Laboratory, Alameda, CA

2007 NRP Sampling Plan

Adjustments

The following are the major adjustments made to the 2007 FSIS NRP:

- Horses are not sampled under the Domestic Scheduled Sampling Plan
- Rabbits are scheduled for antibiotics and avermectins testing.
- More production classes are scheduled for antibiotics in the Domestic Scheduled Sampling Plan. Twelve production classes were scheduled in 2007 while 19 production classes are scheduled in the 2008 NRP.
- Egg products are scheduled for arsenic and sulfonamides testing.
- Zilpaterol has been added to the *beta*-agonist laboratory methodology.
- Bulls and dairy cows are scheduled for flunixin testing.

Appendix I

Tissues Required for Laboratory Analysis

Tissues Required for Laboratory Analysis

Table A-I Lists the tissue, the quantity required for analysis, and the laboratory to which the tissue is sent for analysis.

Table A-I			
Residue	Tissue Analyzed	Quantity (lb)	Lab
Antibiotics	Kidney, liver, muscle	1	ML ¹
Arsenicals	Liver, muscle	1	EL ²
Avermectins	Liver, muscle	1	EL
β -Agonists	Liver, muscle	1	WL ³
Carbadox	Liver, muscle	1	WL
Chloramphenicol	Muscle	1	EL
Chlorinated hydrocarbons/chlorinated organophosphates	Fat	1	WL
Florfenicol	Liver, muscle	1	EL
Flunixin	Liver, muscle	1	ML
Lead and Cadmium	Kidney, muscle	1	EL
MGA	Fat	1	WL
Nitrofurans	Liver	1	WL
Nitroimidazoles	Muscle	1	EL
Sulfonamides	Liver, muscle	1	EL
Thyreostats	Muscle	1	EL
Trenbolone	Liver, muscle	1	ML
Zeranol	Liver, muscle	1	ML

¹ FSIS Midwestern Laboratory

² FSIS Eastern Laboratory

³ FSIS Western Laboratory

Appendix II

FSIS Laboratory Analytical Methods

FSIS Laboratory Analytical Methods

The Food Safety and Inspection Service (FSIS) requires analytical methods for detecting, quantifying, and identifying residues that may be present in meat, poultry, and processed egg products. These methods can be used by the Agency for monitoring and surveillance activities to determine whether a product is adulterated and for human risk assessment evaluations. The Agency uses available methodology to take appropriate regulatory action against adulterated products, consistent with the reliability of the analytical data. This section describes the types of methods used by FSIS to conduct analyses.

Table AI
Analytical Methods
2008 National Residue Program

Compound Class	Compound	Analytical Method			Minimum Proficiency Level ^a			
		Screen	Determinative (quantitative)	Confirmatory (identification)	Screen	Determinative (quantitative)	Confirmatory (identification)	
Antibiotics	Carbadox	LC/MS/MS	GC-ECD	GC/MS	15 ppb	15 ppb	30 ppb	
	Chloramphenicol		GC-ECD	GC-MS		0.25 ppb (M)(B)	0.25 ppb (M)(B), 0.30 ppb (M)(T)	
	Florfenicol		HPLC	GC/SIM-MS		0.3 ppm (L)(B) 0.2 ppm (M)(B)	0.5 ppm (L)(B), 0.3 ppm (M)(B)	
Antibiotics : <i>beta</i> -Lactams	Amoxicillin	7-Plate Bioassay		HPLC/MS- MS		TBD	TBD	
	Ampicillin		Bioassay			0.05 ppm	10 ppb	
	Cefazolin					TBD	50 ppb	
	Cloxacillin					TBD	TBD	
	Desacetyl Cephapirin					TBD	100 ppb	
	Ceftiofur (Parent) Desfuroyl Ceftiofur (Marker residue for Quantiation) Desfuroylceftiofur cysteine disulfide (DCCD) (Metabolite For Confirmation)					HPLC-UV	0.10 ppm	50 ppb
	Dicloxacillin						TBD	TBD
	Nafcillin						TBD	20 ppb
	Penicillin-G					Bioassay	0.05 ppm	50 ppb
	Oxacillin						TBD	TBD
Antibiotics : Tetracyclines	Chlortetracycline	7-Plate Bioassay	Bioassay	HPLC		0.05 ppm	0.5 ppm	
	Oxytetracycline					0.40 ppm		
	Tetracycline							

Table AI (continued)
Analytical Methods
2008 National Residue Program

<i>Compound Class</i>	<i>Compound</i>	<i>Analytical Method</i>			<i>Minimum Proficiency Level ^a</i>		
		<i>Screen</i>	<i>Determinative (quantitative)</i>	<i>Confirmatory (identification)</i>	<i>Screen</i>	<i>Determinative (quantitative)</i>	<i>Confirmatory (identification)</i>
Antibiotics: Macrolides	Clindamycin	7-Plate Bioassay		HPLC/MS- MS			0.1 ppm
	Erythromycin		Bioassay			0.25 ppm	0.1 ppm
	Lincomycin						0.1 ppm
	Pirlimycin						0.1 ppm
	Tilmicosin		HPLC- Ion Pairing			300 ppb (M) 600 ppb (L,K)	1 ppm
	Tulathromycin						1 ppm
	Tylosin		Bioassay			1.0 ppm	0.1 ppm
Antibiotics: Aminoglycosides	Amikacin	7-Plate Bioassay		HPLC/MS- MS			1.0 ppm (L,K), 0.4 ppm (M)
	Apramycin						0.4 ppm (K) 0.1 ppm (L,M)
	Dihydrostreptomycin		Bioassay			0.5 ppm	0.4 ppm (L,K,M)
	Gentamicin		Bioassay			0.15 ppm	0.1 ppm (K,M), 0.4 (L)
	Hygromycin						1.0 ppm (L,K) 0.4 ppm (M)
	Kanamycin						4.0 ppm(L), 2.0 ppm (K), 0.4 ppm (M)
	Neomycin		Bioassay			0.25 ppm	0.1ppm (K,M), 0.4 (L)
	Spectinomycin					10.0 ppm	1.0 ppm (L) 0.4 ppm (K) 0.25 ppm (M)
	Streptomycin		Bioassay			0.5 ppm	0.4 ppm (L,K,M)
	Tobramycin						1.0 ppm (L) 0.1 ppm (K,M)

Table AI (continued)
Analytical Methods
2008 National Residue Program

<i>Compound Class</i>	<i>Compound</i>	<i>Analytical Method</i>			<i>Minimum Proficiency Level^a</i>		
		<i>Screen</i>	<i>Determinative (quantitative)</i>	<i>Confirmatory (identification)</i>	<i>Screen</i>	<i>Determinative (quantitative)</i>	<i>Confirmatory (identification)</i>
Antibiotics: Fluoroquinolones	Ciprofloxacin	7-Plate Bioassay		HPLC/MS- MS			25 ppb
	Danofloxacin						
	Desethylene difloxacin						
	Desmethyl danofloxacin						
	Difloxacin						
	Enrofloxacin						
	Norfloxacin						
Sarafloxacin							
Arsenicals	Arsenicals		AAS	AAS		0.2 ppm	0.2 ppm
Avermectins	Ivermectin		HPLC	HPLC/APCI- MS		7.5 ppb	25 ppb
	Doramectin						
	Moxidectin						
<i>beta</i> -Agonists	Cimaterol	LC/MS/MS		LC/MS/MS	3 ppb	1 ppb (M), 25 ppb (L)	3 ppb
	Clenbuterol				3 ppb		3 ppb
	Ractopamine				21 ppb		25 ppb
	Salbutamol				3 ppb		3 ppb
	Zilpaterol				6 ppb		6 ppb
Heavy metals	Cadmium			ICP/MS			10 ppb
	Lead						25 ppb

Table AI (continued)
Analytical Methods
2008 National Residue Program

Compound Class	Compound	Analytical Method			Minimum Proficiency Level ^a		
		Screen	Determinative (quantitative)	Confirmatory (identification)	Screen	Determinative (quantitative)	Confirmatory (identification)
Hormones, synthetic	Diethylstilbesterol (DES)		GC-MS	GC-MS		0.5 ppb	1.0 ppb (L,M)
	Zeranol	ELISA	GC-MS	GC-MS	0.5 ppb	1.0 ppb	1.0 ppb (L,M)
	<i>alpha</i> -Trenbolone			GC/MS-MS	5.0 ppb		5.0 ppb (L)
	<i>beta</i> -Trenbolone			GC/MS-MS			5.0 ppb (M)
Nitrofurans	Furazolidone	LC/MS-MS			5.0 ppb (L)		5.0 ppb (L)
	Furaltadone				5.0 ppb (L)		5.0 ppb (L)
Nitroimidazoles	Hydroxydimetridazole		HPLC	HPLC/MS/MS		1 ppb	1 ppb
	Hydroxyipronidazole					1 ppb	1 ppb
Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)	Flunixin	ELISA	HPLC/ESI-MS-MS	HPLC/ESI-MS-MS	50 ppb	62.5 ppb (L) 12.5 ppb (M)	62.5 ppb (L) 12.5 ppb (M)
Anabolic Steroids	Melengesterol Acetate (MGA)	ELISA	GC/ECD	HPLC/APCI-MS	10 ppb	10 ppb	12.5 ppb
Sulfonamides	Sulfapyridine		TLC	GC/ESI-MS		0.08 ppm	0.1 ppm
	Sulfadiazine						
	Sulfathiazole						
	Sulfamerazine						
	Sulfamethazine						
	Sulfachloropyridazine						
	Sulfamethoxypryridazine						
	Sulfaquinoxaline						
	Sulfadimethoxine						
	Sulfaethoxypryridazine						
	Sulfaphenazole						
	Sulfatroxazole						
	Sulfisoxazole						
Sulfadoxine							

Table AI (continued)
Analytical Methods
2008 National Residue Program

Compound Class	Compound	Analytical Method			Minimum Proficiency Level ^a		
		Screen	Determinative (quantitative)	Confirmatory (identification)	Screen	Determinative (quantitative)	Confirmatory (identification)
Thyreostats	2-Mercaptobenzimidazole			HPLC/MS-MS			25 ppb
	6-Methyl-2-thiouracil						
	2-Mercapto-1-methylimidazole						
	6-Phenyl-2-thiouracil						
	6-Propyl-2-thiouracil						
	2-Thiouracil						
CHCs/COPs/PCBs	Aldrin	GC-ECD	GC-ECD		0.10 ppm	0.10 ppm	
	<i>alpha</i> -BHC				0.10 ppm	0.10 ppm	
	<i>beta</i> -BHC				0.10 ppm		
	<i>delta</i> -BHC				0.10 ppm		
	Captan				0.04 ppm		
	Carbophenothion				0.06 ppm		
	Chlordene				0.10 ppm		
	Chlorfenvinphos				0.05 ppm	0.05 ppm	
	Chlorpyrifos				0.10 ppm	0.10 ppm	
	Chlorpyrifos methyl				0.10 ppm		
	<i>cis</i> -chlordane				0.02 ppm	0.30 ppm	
	Coumaphos-O				0.40 ppm		
	Coumaphos-S				0.20 ppm	0.20 ppm	
	Dichlofenthion				0.1 ppm		
	Dieldrin				0.10 ppm	0.10 ppm	
	Endosulfan I				0.02 ppm		
	Endosulfan II				0.04 ppm	0.04 ppm	
	Endosulfan sulfate				0.10 ppm		
	Endrin				0.10 ppm	0.10 ppm	
	Endrin Ketone				0.10 ppm		
2,2',4,4',5,5'-hexabromobiphenyl (HBB)	0.10 ppm						

Table AI (continued)
Analytical Methods
2008 National Residue Program

Compound Class	Compound	Analytical Method			Minimum Proficiency Level ^a		
		Screen	Determinative (quantitative)	Confirmatory (identification)	Screen	Determinative (quantitative)	Confirmatory (identification)
CHCs/COPs/PCBs (continued)	Hexachlorobenzene (HCB)	GC-ECD	GC-ECD		0.10 ppm	0.10 ppm	
	Heptachlor epoxides				0.10 ppm	0.10 ppm	
	Heptachlor				0.03 ppm	0.10 ppm	
	Kepone				0.06 ppm		
	Lindane				0.10 ppm	0.10 ppm	
	Linuron				0.50 ppm		
	Methoxychlor				0.50 ppm	0.50 ppm	
	Mirex				0.10 ppm	0.10 ppm	
	Trans-Nonachlor				0.15 ppm	0.15 ppm	
	o,p'-TDE				0.15 ppm		
	o,p'-DDT				0.15 ppm		
	o,p'-DDE				0.10 ppm		
	Oxychlorodane				0.04 ppm	0.04 ppm	
	p,p'-DDE				0.10 ppm	0.10 ppm	
	p,p'-DDT				0.10 ppm	0.15 ppm	
	p,p'-TDE				0.10 ppm	0.15 ppm	
	PCB 1260				0.50 ppm	0.50 ppm	
	PCB 1254				0.50 ppm	0.50 ppm	
	Phosalone				0.02 ppm		
	Poly brominated biphenyls				0.10 ppm		
Ronnel	0.03 ppm	0.03 ppm					
Stirofos	0.04 ppm	0.06 ppm					
Toxaphene	1.00 ppm	1.00 ppm					
trans-chlordane	0.04 ppm	0.30 ppm					

Table AI (continued)
Analytical Methods
2008 National Residue Program

a. Minimum Proficiency Level: The minimum concentration of a residue at which an analytical result will be used to assess a laboratory's quantification capability. This concentration is an estimate of the smallest concentration for which the average coefficient of variation (CV) for reproducibility (i.e., combined within and between laboratory variability) does not exceed 20 percent (9 CFR 318.21).

Key:

AA = Atomic Absorption Spectroscopy

APCI = Atmospheric Pressure Chemical Ionization

B = Bovine

CHCs = Chlorinated hydrocarbons

COPs = Chlorinated organophosphates

ECD = Electron Capture Detection

ELISA = Enzyme Linked Immunosorbent Assay

GC = Gas Chromatography

GPC = Gel Permeation Chromatography

HPLC = high performance liquid chromatography

K = Kidney

L = Liver

M = Muscle

Method detection limit = The lowest quantity of residue (or sample component) that can be reliably observed or found in the sample matrix by the analytical methodology used.

MS = Mass Spectroscopy

NA = not applicable

PCBs = Polychlorinated biphenyls

ppb = parts per billion

ppm = parts per million

SIM = selected ion mode

TBD = To be determined

TLC = Thin Layer Chromatography

T = Turkey

Appendix III

Statistical Table

Statistical Table

Table AIII, *Statistical Table*, indicates the number of samples required to ensure detection of a violation that affects a given percentage of the sampled population. Statistically, if v is the true violation rate in the population and n is the number of samples, the probability, P , of finding at least one violation among the n samples (assuming random sampling) is: $P = 1-(1-v)^n$. Therefore, if the true violation rate is 1%, the probabilities of detecting at least one violation with sampling levels of 300, 230 are 95% and 90%, respectively.

Table AIII
Statistical Table
2008 FSIS National Residue Program

<i>Percentage Violative in Sampled Population</i>	<i>Probability of Detection (Percent)</i>			
	90	95	99	99.9
	<i>Samples Required</i>			
10	22	29	44	66
5	45	59	90	135
1	230	299	459	688
0.5	460	598	919	1,379
0.1	2,302	2,995	4,603	6,905
0.05	4,605	5,990	9,209	13,813