EXHIBIT 65

FOOD SAFETY AND INSPECTION SERVICE

2008 FSIS NATIONAL RESIDUE PROGRAM DATA

United States Department of Agriculture
Food Safety and Inspection Service
Office of Public Health Science

Published
October 2009

TABLE OF CONTENTS

PREFACE

The "2008 Food Safety and Inspection Service (FSIS) National Residue Program Data" publication (the "Red Book") explains FSIS' chemical residue sampling plans and presents National Residue Program (NRP) testing results by calendar year. [For those reading this electronically, this document has been commonly known as the "Red Book" because the covers of the printed versions are red.] In addition, the following appendices are included for the convenience of the reader: Appendix I, *Analytical Methods;* Appendix II, *Statistical Table;* and Appendix III, *Summary of Scheduled Sampling Data from 2005 to 2007.*

CONTACTS AND COMMENTS

The Chemical Residue Risk Branch (CRRB), Risk Assessment Division (RAD), Office of Public Health Science, FSIS, USDA, coordinated this effort and is responsible for the publication of this material. Questions about FSIS' NRP should be directed to the USDA, FSIS, RAD: 333 Aerospace Center; 1400 Independence Avenue, SW; Washington, D.C. 20250-3700, telephone (202) 690-6409, or fax (202) 690-6565.

ACKNOWLEDGEMENTS

We would like to acknowledge Dr. Alice Thaler, Senior Director for Program Services, OPHS, Ms. Janell Kause, RAD Division Director, and Dr. Chuanfa Guo, Acting Chief, CRRB/RAD, who advised the working team for this project. We would like to thank Ms. Gail Graves and Ms. Lily Thienard, Office of Chief Information Officer. In addition, we would like to extend our gratitude to Ms. Margaret O'Keefe (CRRB/RAD), Ms. Hitelia Castellanos (CRRB/RAD) and a special thanks to Mr. Noah Hull (CRRB/RAD intern). Thank you to the thousands of FSIS field inspection personnel who collected and submitted the residue samples, and to the FSIS laboratory staff, who prepared the residue samples for analysis, analyzed the residue samples and documented the results from the analyses. In addition, we want to thank the Surveillance Advisory Team members who submitted their feedback and recommendations on enhancing the format and the content of Red Book publication.

Principal Authors

Mr. Naser Abdelmajid	USDA/FSIS/OPHS/RAD
Dr. Doritza Pagán-Rodríguez	USDA/FSIS/OPHS/RAD

INTRODUCTION

The Food Safety and Inspection Service (FSIS), the U.S. Department of Agriculture's public health regulatory agency, works with the Environmental Protection Agency (EPA) and the Department of Health and Human Services' Food and Drug Administration (FDA), to control veterinary drug, pesticide, and environmental contaminant residues in meat, poultry, and egg products. Residue control is a cooperative effort. EPA* and FDA** have statutory authority for establishing residue tolerances or action levels, and FSIS, through the National Residue Program (NRP) ,tests animal tissues and egg products to verify that tolerances or action levels are not violated.

FDA, under the Federal Food, Drug, and Cosmetic Act, establishes tolerances or action levels for veterinary drugs, food additives, and unavoidable environmental contaminants. EPA, through the Federal Insecticide, Fungicide and Rodenticide Act (as modified by the Food Quality Protection Act), sets tolerance levels for registered pesticides. For cancelled pesticides, action levels (similar to tolerances, but less formal) are established by FDA based on recommendations that EPA published in the Federal Register. FDA and EPA also have the authority to ensure compliance with established tolerances or action levels.

FSIS collects samples of meat, poultry, and egg products at Federally inspected establishments and analyzes the samples at FSIS laboratories for chemical residues of veterinary drugs, pesticides, and environmental contaminants. Laboratory findings that exceed established tolerances and action levels are shared with FDA and EPA. This authority is provided under the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act. FSIS regulations are published in Title 9 of the Code of Federal Regulations (9 CFR), chapter III.

Since 1967, FSIS has administered the NRP to collect data on chemical residues in domestic and imported meat, poultry, and egg products. The NRP is designed to provide: (1) a structured process for identifying and evaluating compounds of concern by production class; (2) the capability to analyze for compounds of concern; (3) appropriate regulatory follow-up to reports of violative tissue residues; and (4) collection, statistical analysis, and reporting of the results of these activities.

With the implementation of the Hazard Analysis and Critical Control Point (HACCP) inspection system, another important component of the NRP is to provide verification of residue control in HACCP systems. As part of the HACCP regulation, slaughter and production establishments are required to identify all chemical residue hazards that are reasonably likely to occur, and develop systems to guard against them. A vigilant chemical residue prevention program is essential to foster the prudent use of veterinary drugs and pesticides in food animals. In 1999, the NRP was modified to make residue evaluation more consistent with risk analysis principles.

* Tolerance levels established by EPA are published in Title 40 CFR.
** Tolerance levels established by FDA are published in Title 21 CFR.

The NRP includes a variety of sampling plans to identify violative levels of chemical residues and to reduce consumers' exposure to chemical contaminants. The range of chemical compounds evaluated for inclusion in the various NRP sampling plans is comprehensive. It includes approved (legal) and unapproved (illegal) veterinary drugs, pesticides that may appear in meat, poultry, and egg products, and other xenobiotic and naturally occurring compounds that may pose a potential human health hazard.

A violation in a production class (food animal or egg product) occurs when a chemical residue is detected and the residue is in excess of an established tolerance or action level. The collection of samples is either scheduled from FSIS Headquarters (scheduled sampling) or initiated by the inspector-in-charge (inspector generated sampling). In scheduled sampling, samples are collected from healthy appearing animals and the findings provide exposure assessment data. The majority of the NRP sampling is conducted under inspector generated sampling. These samples are collected in establishments from suspect animals; their carcasses are subject to retention and condemnation if a violative level of chemical residue is found. FSIS notifies FDA of the violation and assists in obtaining the names of producers and, in the case of food animal products, other parties involved in offering the animals for sale.

FDA and cooperating state agencies follow-up on known violators with educational visits. If a problem is not corrected, subsequent FDA visits could result in enforcement action, including prosecution. FSIS posts a Repeat Violator List on the agency's web site, listing the names and addresses of parties FDA has determined are responsible for more than one veterinary drug, pesticide, or other chemical residue violation in a 12-month period. The list provides helpful information to processors and producers working to avoid illegal levels of residues, serves as a deterrent for violators, and enables FSIS to make better use of resources.

Data gathered in the NRP are used to verify the safety of meat, poultry, and egg products in the United States. The program helps FSIS, FDA, and EPA enforce Federal laws and regulations, and assists in the design of programs to enhance the nation's residue control programs.

SAMPLING PLANS OF THE NATIONAL RESIDUE PROGRAM

The National Residue Program (NRP) consists of two sampling plans: domestic and import. These plans are further divided to facilitate the management of chemical residues such as veterinary drugs, pesticides, and environmental contaminants in meat, poultry, and egg products. The domestic sampling plan includes scheduled sampling and inspector generated sampling. The import reinspection sampling plan is separated into normal sampling, increased sampling, and intensified sampling.

DOMESTIC SAMPLING PLAN

Scheduled Sampling

Scheduled sampling plans consist of the random sampling of tissue from healthy appearing food animals. Scheduled sampling plans are generated from FSIS using the FSIS Form 10,210-3. The development of scheduled sampling plans is a process that proceeds in the following manner: 1) determine which compounds are of food safety concern; 2) use algorithms to rank the selected compounds; 3) pair these compounds with appropriate production classes; and 4) establish sample sizes. The Surveillance Advisory Team (SAT) at its annual meeting determines the compound/production class pairs. The FSIS Chemical Residue Risk Branch (CRRB) determines the number of samples to be collected based on statistical analysis techniques. In the 2006 NRP, FSIS started using number of samples of either 230 or 300 animals for each compound/production class pair. Statistically, selecting 230 and 300 samples per production class population assures a 90 percent and 95 percent probability, respectively, to detect residue violations if the violation rate in the population is equal to or greater than one percent. CRRB has adopted a default number of 300 samples allowing the identification of true residue violation rates above one percent in the different animal populations. This number of samples and resulting violation data are used to verify two different types of process control. The first is to verify that industry's process controls meet this public health standard for the compound/production class pairs being tested. The second is to verify that the establishments' HACCP plans for residues are in control. Finally, reviews and final adjustments to these sampling plans are made by FSIS Senior Management, FSIS laboratory staff, FDA, and EPA. The following types of assessments are being scheduled:

Exposure Assessments

Exposure Assessments are used:

- By FSIS, FDA, and EPA to evaluate population exposure to chemical residues in the food supply (uses chemical residue prevalence and concentration data);
- To guide FSIS' decision to condemn carcasses with violative levels of residue;
- To guide FDA's decisions regulating producers when a sample contains violative levels of residues;
- To guide industry's decision to retain product until the sample has been tested; and
- To guide industry's decision to recall product that was not retained while the sample was tested, and found to contain violative levels of residue.

Exploratory Assessments

Exploratory Assessments are designed by Chemical Residue Risk Branch:

- To reinvestigate animal populations from ongoing or previous exposure assessments if the violation rate is confirmed at one percent or greater;
- To investigate animal populations when the compounds in question have no established tolerances; and
- To respond to intelligence reports from the field.

Inspector Generated Sampling

Inspector generated sampling is conducted by in-plant Public Health Veterinarians (PHVs) using FSIS Form 10,000-2. This occurs when the in-plant PHV suspects that an animal may have violative levels of chemical residues. Currently, inspector generated sampling targets *individual suspect animals* and *suspect populations of animals*. When an inspector generated sample is collected, the carcass is held pending the results of laboratory testing. If a carcass is found to contain violative levels of residues, the carcass is condemned.

Sampling for individual suspect animals

The in-plant inspector selects a carcass for sampling based on professional judgment and public health criteria outlined in FSIS Directives 10,800.1 and 10,220.3. These criteria include but are not limited to the following: animal disease signs and symptoms; producer history; or results from random scheduled sampling. Some samples are screened in the plant by the Inspector In Charge (IIC) and verified when necessary by a PHV.

Other samples are sent directly to the laboratory for analysis. For example, if the IIC suspects the misuse of either an antibiotic or sulfonamide drug in an animal, he or she can perform the Fast Antimicrobial Screening Test (FAST) in-plant screening test. If the result of the screening test is positive, then the sample is sent to an FSIS laboratory for confirmation. If the IIC does not have FAST capability, the sample can be sent directly to the FSIS laboratory for testing.

Sampling for suspect animal populations

Sampling for suspect populations of animals is generally directed by an FSIS regulation, directive (e.g., FSIS Directive 10,800.1), or notice (e.g., show animals and bob veal).

IMPORT REINSPECTION SAMPLING PLAN

Imported meat, poultry, and egg products are sampled at U.S. ports of entry to detect chemical residues. Port-of-Entry Reinspection is a monitoring program conducted to verify the equivalence of inspection systems in exporting countries. The chemical residue sampling program is one of several Types Of Inspection (TOI) conducted during FSIS reinspection of imported products. All imported products are subject to reinspection. One or more TOIs are conducted on every lot of product before it enters the United States. The following are the three levels of chemical residue reinspection:

- Normal sampling is defined as random sampling from a lot;
- Increased sampling is defined as above the normal sampling as the result of an Agency management decision; and
- Intensified sampling is defined as occurring when a previous sample for a TOI failed to meet U.S. requirements.

For both normal and increased sampling, the lot is not required to be retained pending laboratory results; however, the importer may choose to do so. The lot is subject to recall if it is not retained and is found to contain violative levels of residue. For intensified sampling, the lot must be retained pending laboratory results. The data obtained from laboratory analysis are entered into the Automated Import Information System (AIIS), an FSIS database that is designed to generate reinspection assignments, receive and store results, and compile histories for the performance of foreign establishments certified by the inspection system in the exporting country.

ESTIMATED LIVESTOCK, POULTRY, AND EGG PRODUCTS CONSUMPTION DATA

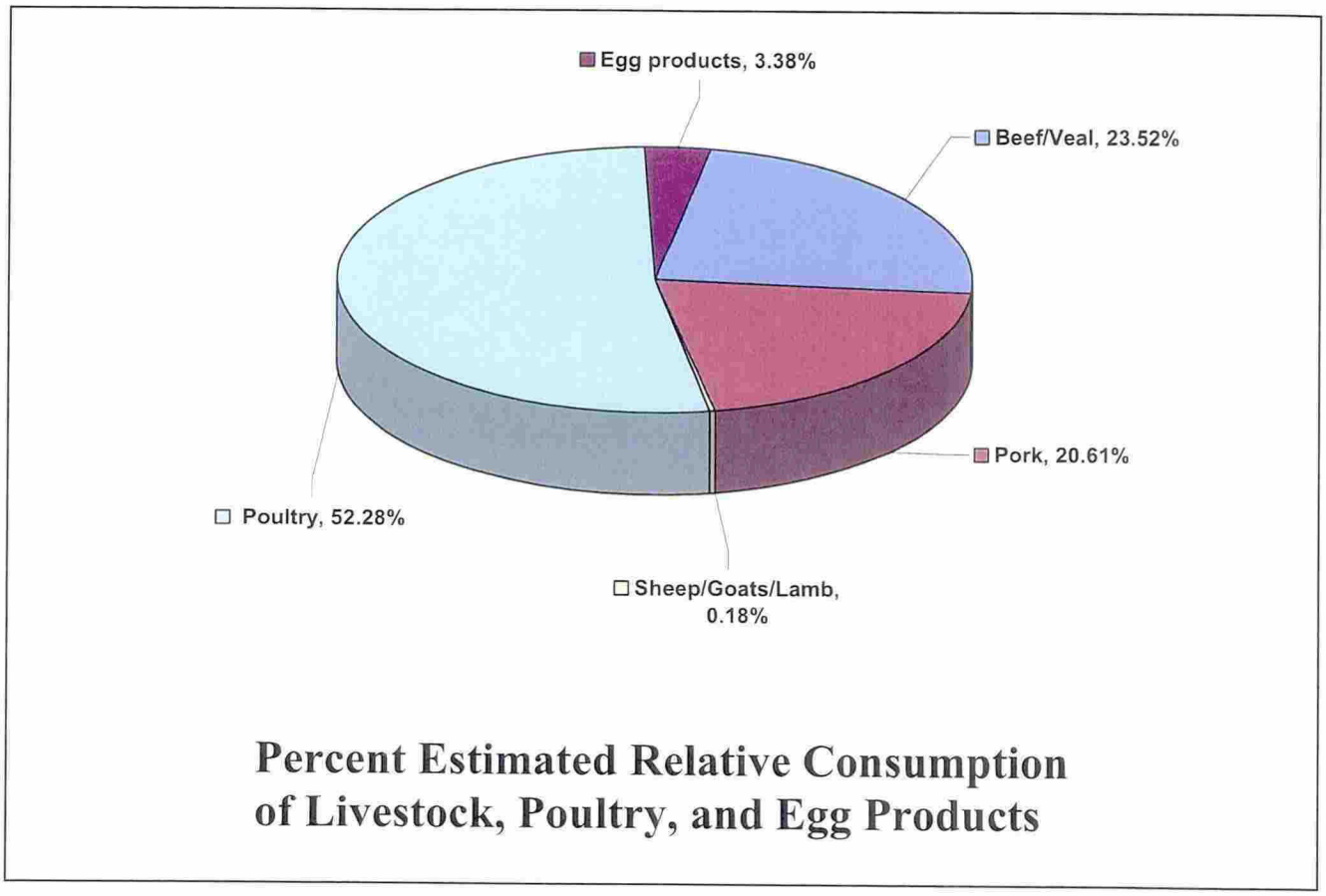
Table 1 and Chart 1 present, *2008 Consumption Data*, including the number of head slaughtered or pounds of eggs processed, pounds per animal (dressed weight), total pounds (dressed weight), and the percent estimated relative consumption of domestic and exported product for each production class.

Table 1
2008 Estimated Relative Consumption Data by Production Class

Production Class	Number of Head Slaughtered [A]	Pounds per Animal (dressed weight) [B]	Total Pounds (dressed weight)	Percent Estimated Relative Consumption
Bulls	620,176	888	550,716,288	0.490%
Beef cows	3,575,807	609	2,177,666,463	1.937%
Dairy cows	2,606,240	609	1,587,200,160	1.412%
Heifers	10,086,668	772	7,786,907,696	6.928%
Steers	16,929,880	838	14,187,239,440	12.622%
Bob veal	518,093	75	38,856,975	0.035%
Formula-fed veal	387,088	245	94,836,560	0.084%
Non-formula-fed veal	11,079	350	3,877,650	0.003%
Heavy calves	35,166	400	14,066,400	0.013%
SUBTOTAL, CATTLE	**34,770,197**		**26,441,367,632**	**23.525%**
Market hogs	110,668,451	198	21,912,353,298	19.495%
Roaster pigs	815,756	70	57,102,920	0.051%
Boars/Stags	548,425	208	114,072,400	0.101%
Sows	3,527,594	308	1,086,498,952	0.967%
SUBTOTAL, SWINE	**115,560,226**		**23,170,027,570**	**20.614%**
Sheep	119,169	69	156,160,179	0.139%
Lambs	2,263,191	67	7,984,323	0.007%
Goats	658,199	50	32,909,950	0.029%
SUBTOTAL, OVINE	**3,040,559**		**197,054,452**	**0.175%**
Bison	54,828	610	33,445,080	0.030%
TOTAL, ALL LIVESTOCK	**153,425,810**		**49,841,894,734**	**44.344%**
Young chickens	8,943,751,399	Not reported	49,837,505,794	44.340%
Mature chickens	154,053,556	Not reported	890,773,692	0.793%
Young turkeys	269,413,032	Not reported	7,811,149,068	6.950%
Mature turkeys	2,079,804	Not reported	54,768,945	0.049%
Ducks	24,139,271	Not reported	161,755,860	0.144%
Geese	141,164	Not reported	1,948,936	0.002%
Other fowl (includes squab)	2,252,409	Not reported	2,527,327	0.002%
SUBTOTAL, POULTRY	**9,395,830,635**		**58,760,429,622**	**52.279%**
Rabbits	258,340	Not reported	1,305,792	0.001%
Egg products	Not applicable	Not applicable	3,793,710,000 [C]	3.375%
GRAND TOTAL in POUNDS, ALL PRODUCTION CLASSES			**112,397,340,148**	**100%**

(A) Number of heads is obtained from the Animal Disposition Reporting System (ADRS). (B) Average dressed weights are obtained from the publication: "Livestock Slaughter 2008 Summary" National Agricultural Statistics Service (NASS), March 2009. In instances when the average weight is not available, an average weight based on previous calendar year's data was imputed. (C) For Fiscal Year 2008

Chart 1
2008 Estimated Relative Consumption Data by Production Class*



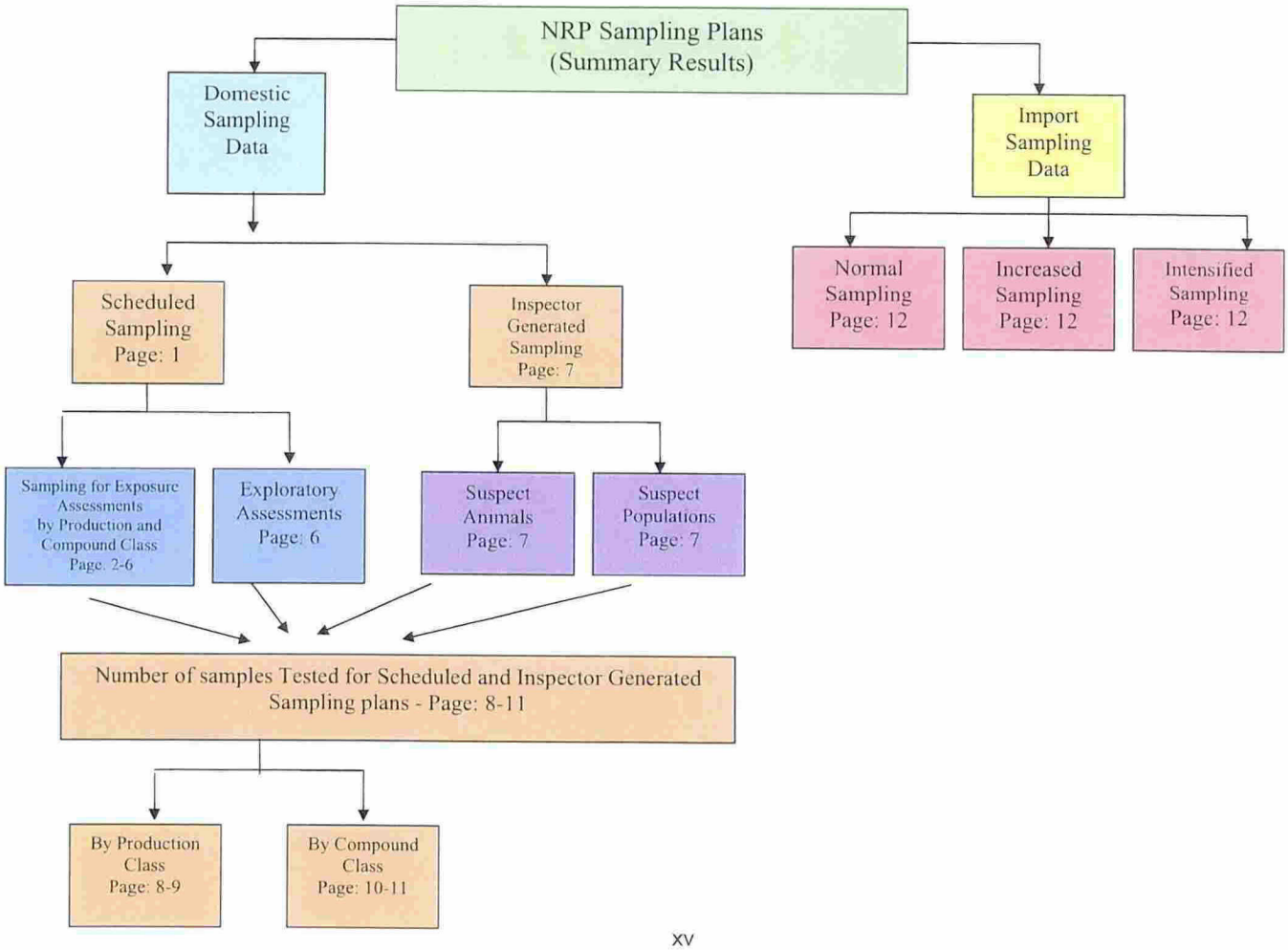
*FSIS employs techniques and principles from the field of risk analysis to determine the relative public health concerns associated with the data obtained in the scheduled sampling plan- sampling for exposure assessments. The information on the residues prevalence and the residues concentration is combined with consumption data to estimate exposure.

Exposure = Consumption Data x Chemical Residue Levels

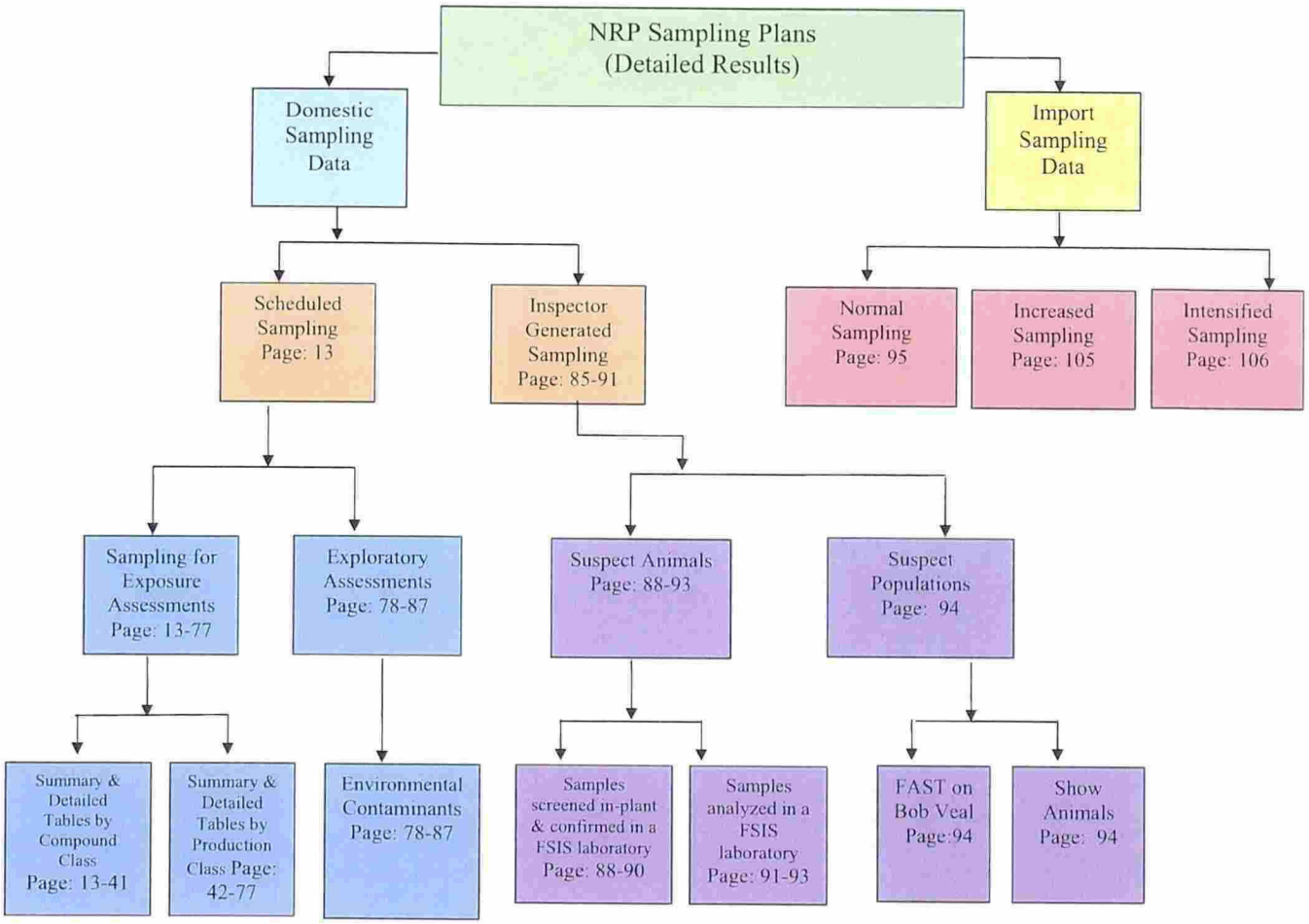
DEFINITIONS OF FSIS PRODUCTION CLASSES

- Beef cows are mature female cattle bred for muscle development, ordinarily having given birth to one or more calves.
- Boars are mature swine showing male sexual characteristics.
- Bulls are mature, uncastrated male cattle.
- Calves/veal definitions are under FSIS review.
- Dairy cows are mature female cattle bred for milk production, ordinarily having given birth to one or more calves.
- Ducks are birds of both sexes and any age.
- Egg products are yolks, whites, or whole eggs after breaking and are processed as dried, frozen, or liquid.
- Geese are birds of both sexes and any age.
- Goats are animals of both sexes and any age.
- Heifers are young, female cattle that have not yet given birth to a calf.
- Lambs are defined as sheep younger than 14 months and having a break joint in at least one leg.
- Market hogs are swine usually marketed near 6 months of age and 200 to 300 pounds live weight.
- Mature chickens are adult female birds, usually more than 10 months of age.
- Mature turkeys are birds of both sexes and usually more than 15 months of age.
- Other livestock include bison, deer, elk, etc.
- Other poultry include ratites (typically ostriches, emus and rheas), guineas, squabs (young, unfledged pigeons), adult pigeons, pheasants, grouse, partridge, quail, etc.
- Rabbits are any of several lagomorph mammals of both sexes and any age.
- Roaster pigs are animals of both sexes and any age that are marketed with the carcass unsplit and with the head on.
- Sheep are mature animals of both sexes.
- Sows are mature female swine ordinarily having given birth to one or more litters.
- Stags are male swine castrated after they have reached sexual maturity.
- Steers are male cattle castrated before sexual maturity.
- Young chickens include: broilers/fryers birds of both sexes that are usually less than 10 weeks of age; roasters, birds of both sexes usually less than 12 weeks of age; and capons, surgically castrated male birds usually less than 8 months of age.
- Young turkeys include fryer/roaster birds that are of both sexes and usually less than 12 weeks of age, and include turkeys that are birds of both sexes usually less than 6 months of age.

Flow Chart of the NRP Sampling Plans and Red Book Contents



Flow Chart of the NRP Sampling Plans and Red Book Contents

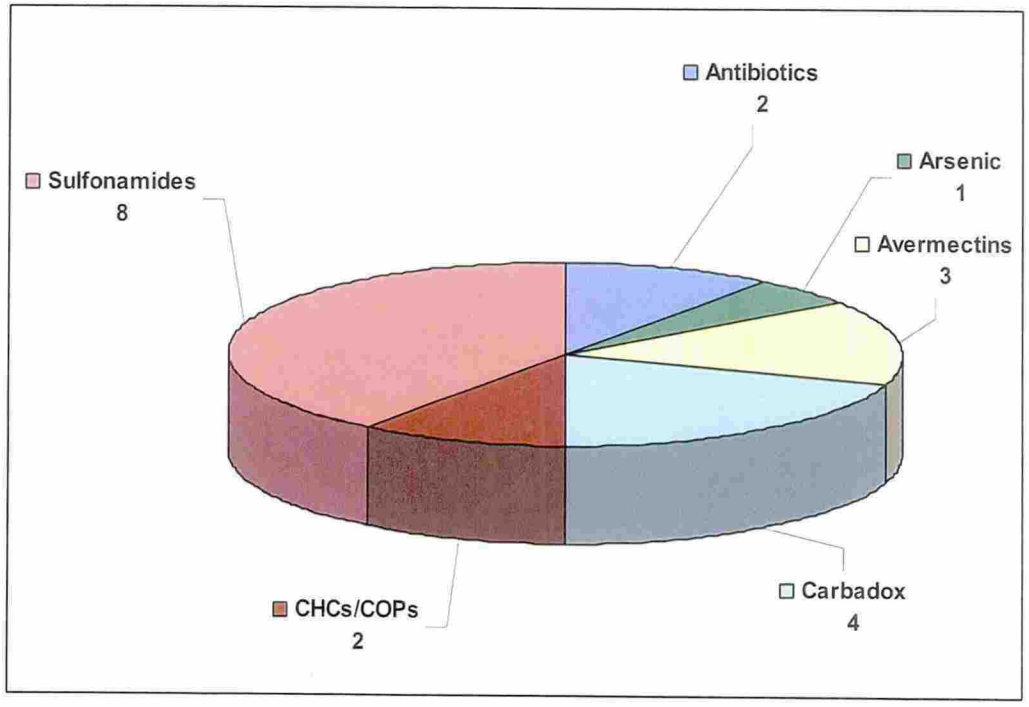


SUMMARY OF DOMESTIC DATA

SCHEDULED SAMPLING – Sampling for Exposure Assessments

Nineteen (19) compound classes of veterinary drugs and pesticides comprised of approximately 120 chemical compounds were analyzed. Of the 17,876 samples analyzed, 20 chemical residue violations were found. The residue violations consisted of two (2) antibiotics, one (1) arsenic, three (3) avermectins/milbemycins, four (4) carbadox, two (2) chlorinated hydrocarbons/chlorinated organophosphates, and eight (8) sulfonamides. There were no residue violations in the testing of *beta*-agonists, chloramphenicol, flunixin, florfenicol, melengestrol acetate, nitrofurans, nitroimidazoles, thyreostats, trenbolone, and zeranol.

Chart 2
Residue Violations
2008 Scheduled Sampling Plan



DOMESTIC SCHEDULED SAMPLING RESULTS FROM THE 2008 FSIS SCHEDULED SAMPLING PLANS- Sampling for Exposure Assessments

This section reports the summary results from the FSIS Domestic Scheduled Sampling Plan. These summaries are presented by production class and by compound class.

- **BY PRODUCTION CLASS**

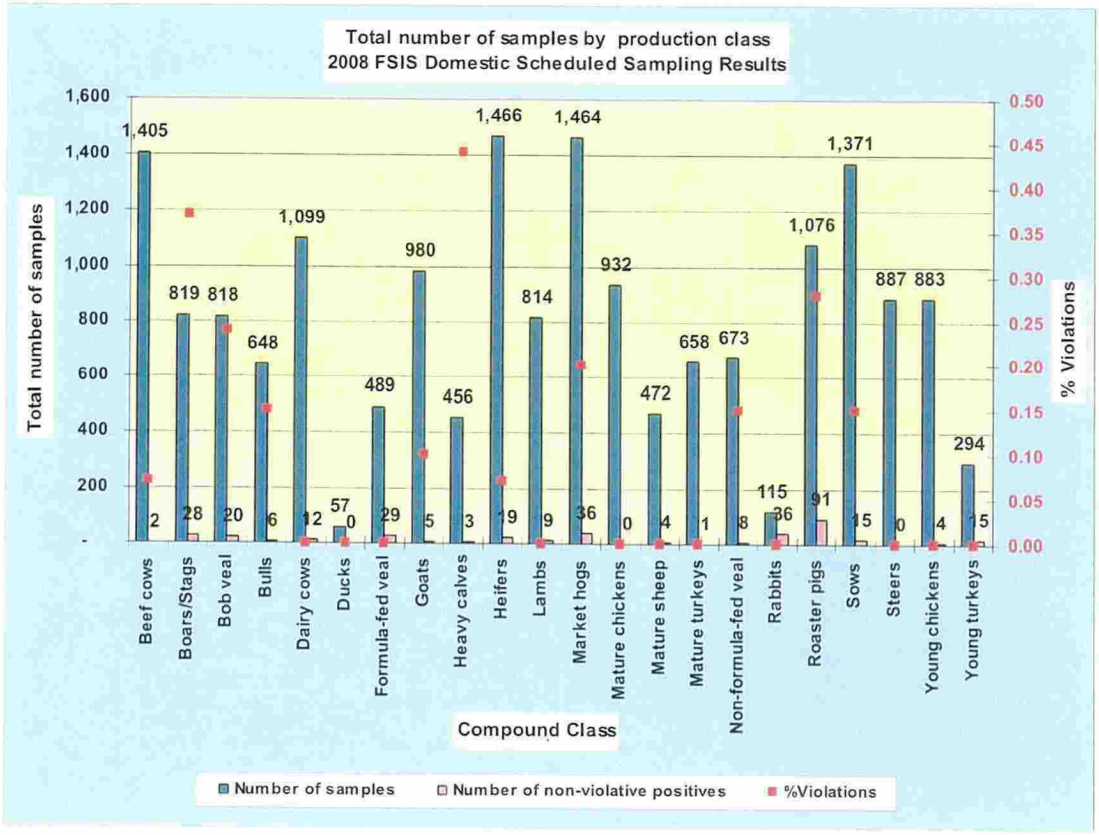
The results from the 2008 Domestic Scheduled Sampling Plan by production class are reported in Table 2 below.

Table 2
Total number of samples by Production Class
2008 FSIS Domestic Scheduled Sampling Plan

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Beef cows	1,405	2	1	0.07
Boars/Stags	819	28	3	0.37
Bob veal	818	20	2	0.24
Bulls	648	6	1	0.15
Dairy cows	1,099	12	0	0.00
Ducks	57	0	0	0.00
Formula-fed veal	489	29	0	0.00

Table 2 - *continued*
Total number of samples by Production Class
2008 FSIS Domestic Scheduled Sampling Plan- Sampling for Exposure Assessments

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Goats	980	5	1	0.10
Heavy calves	456	3	2	0.44
Heifers	1,466	19	1	0.07
Lambs	814	9	0	0.00
Market hogs	1,464	36	3	0.20
Mature chickens	932	0	0	0.00
Mature sheep	472	4	0	0.00
Mature turkeys	658	1	0	0.00
Non-formula-fed veal	673	8	1	0.15
Rabbits	115	36	0	0.00
Roaster pigs	1,076	91	3	0.28
Sows	1,371	15	2	0.15
Steers	887	0	0	0.00
Young chickens	883	4	0	0.00
Young turkeys	294	15	0	0.00
Total	**17,876**	**343**	**20**	0.11


Total number of samples by production class
2008 FSIS Domestic Scheduled Sampling Results
Total number of samples
% Violations
Compound Class
Beef cows
Boars/Stags
Bob veal
Bulls
Dairy cows
Ducks
Formula-fed veal
Goats
Heavy calves
Heifers
Lambs
Market hogs
Mature chickens
Mature sheep
Mature turkeys
Non-formula-fed veal
Rabbits
Roaster pigs
Sows
Steers
Young chickens
Young turkeys
1,405
819
818
648
1,099
57
489
980
456
1,466
814
1,464
932
472
658
673
115
1,076
1,371
887
883
294
2
28
20
6
12
0
29
5
3
19
9
36
0
4
1
8
36
91
15
0
4
15
Number of samples
Number of non-violative positives
%Violations

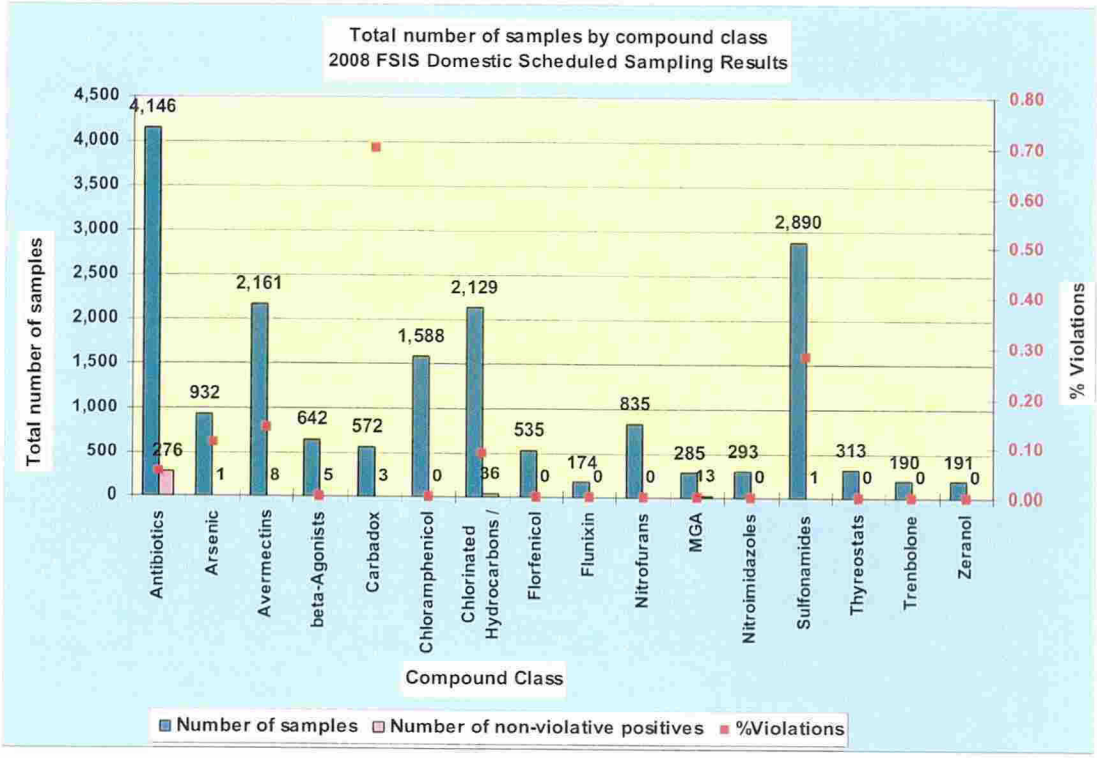
DOMESTIC SCHEDULED SAMPLING RESULTS FROM THE 2008 FSIS SCHEDULED SAMPLING PLANS-

- **BY COMPOUND CLASS**

The following result is from the 2008 Domestic Scheduled Sampling Plan by compound class are reported in Table 3 below.

Table 3
Total Number of Samples by Compound Class
2008 FSIS Domestic Scheduled Sampling Plan- Sampling for Exposure Assessments

Compound Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	4,146	276	2	0.05
Arsenic	932	1	1	0.11
Avermectins	2,161	8	3	0.14
beta-Agonists	642	5	0	0.00
Carbadox	572	3	4	0.70
Chloramphenicol	1,588	0	0	0.00
Chlorinated Hydrocarbons / Chlorinated Organophosphates	2,129	36	2	0.09
Florfenicol	535	0	0	0.00
Flunixin	174	0	0	0.00
MGA	285	13	0	0.00
Nitrofurans	835	0	0	0.00
Nitroimidazoles	293	0	0	0.00
Sulfonamides	2,890	1	8	0.28
Thyreostats	313	0	0	0.00
Trenbolone	190	0	0	0.00
Zeranol	191	0	0	0.00
Total	**17,876**	**343**	**20**	**0.11**



SCHEDULED SAMPLING – Exploratory Assessments

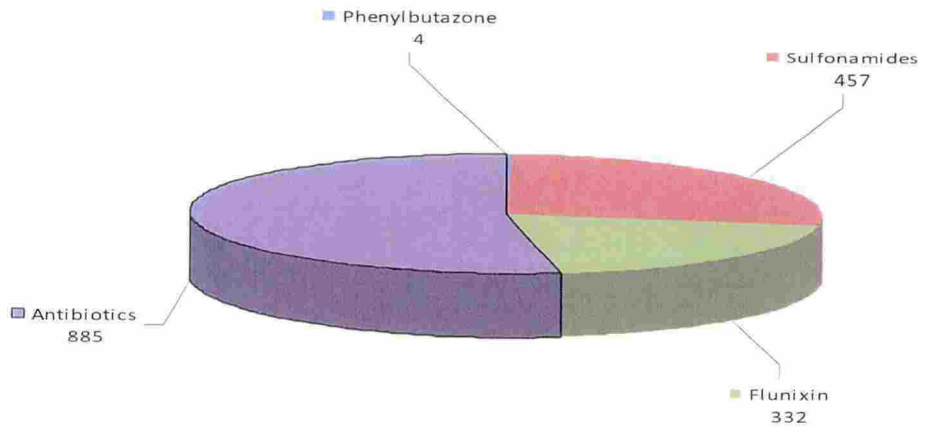
Environmental Contaminants – Lead and Cadmium testing was conducted on 319 Beef cows. The results of the analysis are reported on pages 78-87.

INSPECTOR GENERATED SAMPLING

- **Sampling for suspect animals**

Nine (9) compound classes of veterinary drugs and pesticides were analyzed. Of the 135,552 samples analyzed, 1,678 chemical residue violations were found. The residue violations consisted of four (4) Phenylbutazone, 457 Sulfonamides, 332 Flunixin, and 885 Antibiotics.

Chart 3
Residue Violations
2008 Inspector Generated Sampling Plan-suspect animals



INSPECTOR GENERATED SAMPLING

- **Sampling for suspect populations**

Bob veal – Fast Antimicrobial Screen Test was used to screen 32,890 bob veal calves for antibiotics and sulfonamides. The total bob veal calves tested included both testing of a suspect population and testing of suspect animals. Of the animals tested, FSIS laboratory confirmed 406 violations in 292 animals. The residue violations consisted of 19 (Desfuroylceftiofur DCA or DCCD), 39 Gentamycin Sulfate , 178 Neomycin , 12 Oxytetracycline, seven (7) Tetracycline , six (6) Tilmicosin, 34 Penicillin, four (4) Sulfadiazine, Nine (9) Sulfadimethoxine, 27 Sulfamethazine, 28 Sulfamethoxazole, one (1) Sulfathiazole, and 42 Flunixin.

Show animals
FSIS conducted analyses for antibiotics and sulfonamides on three (3) goats, five (5) lambs, eighteen (18) market hogs, and six (6) steers. One Tetracycline violation was found in a market hog sample.

FSIS conducted analyses for clenbuterol, salbutamol, ractopamine, and cimaterol (*beta*-agonists) on two (2) bovine, two (2) heifers, six (6) lambs, seven (7) market hogs, two (2) mature sheep, and nine (9) steers. No violations were found.

NUMBER OF SAMPLES TESTED BY PRODUCTION AND COMPOUND CLASSES FOR SCHEDULED AND INSPECTOR GENERATED SAMPLING PLANS

NUMBER OF SAMPLES TESTED BY PRODUCTION CLASS

Table 4, *Number of Samples Tested by Production Class*, presents the number of animal samples tested under scheduled and inspector generated sampling plans for each production class.

Table 4
Number of Samples Tested by Production Class
2008 Domestic Sampling Plan

Production Class	Number of samples tested under Scheduled-sampling for exposure assessments	Number of samples tested under Scheduled-exploratory assessment	Number of samples tested under Inspector Generated-suspect animals	Number of samples tested under Inspector Generated-suspect populations
Beef cows	1405	638	4,678	0
Boars/Stags	819	0	317	0
Bob veal	818	0	32,890[1]	32,890[1]
Bovine[2]	0	0	15	2
Bulls	648	0	575	0
Dairy cows	1099	0	80,131	0
Ducks	57	0	0	0
Formula-fed veal	489	0	1,598	0
Goats	980	0	180	7
Heavy calves	456	0	801	0
Heifers	1466	0	1,381	2
Lambs	814	0	374	18

[1] The total analyzed includes both testing of suspect population and testing of suspect animals.
[2] Bovine refers to cattle production classes. The collected samples were coded as bovine by the inspector.

Table 4 - *continued*
Number of Samples Tested by Production Class
2008 Domestic Sampling Plan

Production Class	Number of samples tested under Scheduled-sampling for exposure assessments	Number of samples tested under Scheduled-exploratory assessment	Number of samples tested under Inspector Generated-suspect animals	Number of samples tested under Inspector Generated-suspect populations
Market hogs	1,464	0	5,256	50
Mature chickens	932	0	0	0
Mature sheep	472	0	137	2
Mature turkeys	658	0	0	0
Non-formula-fed veal	673	0	257	0
Rabbits	115	0	0	0
Roaster pigs	1076	0	301	0
Sows	1371	0	3,019	0
Steers	887	0	3,271	25
Young chickens	883	0	2	0
Young turkeys	294	0	5	0
*Other *	0	0	364	0
Total	**17,876**	**638**	**135,552**	**32,996**

Other: Unspecified production class

NUMBER OF SAMPLES TESTED BY COMPOUND CLASS

Table 5, *Number of Samples Tested by Compound Class,* presents the number of tests performed under scheduled and inspector generated sampling plans for each compound class.

Table 5
Number of Samples Tested by Compound Class
2008 Domestic Sampling Plan

Compound Class	Number of samples tested under Scheduled-sampling for exposure assessments	Number of samples tested under Scheduled-exploratory assessment	Number of samples tested under Inspector Generated-suspect animals	Number of samples tested under Inspector Generated-suspect populations
Antibiotics (7-plate bioassay)	4,146	0	0	0
Antibiotics and Sulfonamides	0	0	138	78
Antibiotics, Sulfonamides, Flunixin, and Phenylbutazone[1]	0	0	135,389	32,890
Arsenic	932	0	0	0
Avermectins	2,161	0	5	0
beta-Agonists	642	0	9	28
Cadmium	0	319	0	0
Carbadox	572	0	0	0
CHC's/COP's	2,129	0	0	0
Chloramphenicol	1588	0	0	0
Florfenicol	535	0	1	0
Flunixn	174	0	1	0
Lead	0	319	0	0
Melengestrol acetate	285	0	0	0

1 - In the Inspector Generated Sampling plan, samples that are found to be FAST positive in the plant are further analyzed for flunixin and phenylbutazone (non-steroidal anti-inflammatory compounds) in the laboratory.

Table 5 - *continued*
Number of Samples Tested by Compound Class
2008 Domestic Sampling Plan

Compound Class	Number of samples tested under Scheduled-sampling for exposure assessments	Number of samples tested under Scheduled-exploratory assessment	Number of samples tested under Inspector Generated-suspect animals	Number of samples tested under Inspector Generated-suspect populations
Nitrofurans	835	0	0	0
Nitroimidazoles	293	0	0	0
Phenylbutazone	0	0	1	0
Sulfonamides	2,890	0	6	0
Thyreostats	313	0	0	0
Trenbolone	190	0	2	0
Zeranol	191	0	0	0
Total	**17,876**	**638**	**135,552**	**32,996**

SUMMARY OF IMPORT DATA

The United States imported approximately 3,293,467,209 pounds of fresh and processed meat, poultry, and egg products. These products were imported from 28[1] of the 33 countries eligible for exportation to the United States[1]. The import testing program included analysis of approximately 121 chemical residues from 13 compound classes of veterinary drugs and pesticides. Two (2) violations were found in the 5,185 reported results.

NORMAL

Thirteen (13) compound classes of veterinary drugs and pesticides were tested. From these 13 compound classes, approximately 121 chemical residues were analyzed. One (1) ivermectin violation was found in the 5,067samples analyzed.

INCREASED

Two (2) compound classes of veterinary drugs and pesticides were tested. From these seven compound classes, approximately 59 chemical residues were analyzed. No violations were found in the 55 samples analyzed.

INTENSIFIED

Eight (8) compound classes of veterinary drugs and pesticides were tested. From these eight compound classes, approximately 65 chemical residues were analyzed. One (1) ivermectin violation was found in the 63 samples analyzed.

[1] The 28 of the 33 countries that were eligible for import are the following: Argentina, Australia, Austria, Brazil, Canada, Costa Rica, Croatia, Denmark, England-Wales, Finland, Germany, Great Britain, Honduras, Hungary, Iceland, Ireland (Ireland and Northern Ireland), Israel, Italy, Japan, Mexico, Netherlands, New Zealand, Nicaragua, Poland, Spain, Sweden, Uruguay, and Yugoslavia.

DOMESTIC SAMPLING RESULTS FROM FSIS DATABASE

Tables 6 to 21 identify information as received from the FSIS Database System, Microbiological and Residue Computer Information System (MARCIS). These tables list summary and detailed results by compound class.

SCHEDULED SAMPLING – SAMPLING FOR EXPOSURE ASSESSMENTS, COMPOUND CLASS DATA (Summary and Detailed Tables)

Domestic scheduled sampling results are presented in two summary tables (Tables 6a-21a and tables 6b-21b) – (unless either there is only one compound in the class or there is no violations, then the second summary table is not necessary). In addition to the summary tables, detailed tables (Tables 6c-21c) list chemical residue levels (range) for each compound class tested.

The first summary table states the total number of animals tested (or the number of composite samples in the case of poultry), the number of non-violative positives (compounds detected at a level equal to or below the established tolerance), the number of violations, and the percent of violations, for each compound class. Since analyses for multiple compounds can be performed on the same sample, one sample (one animal or a composite from one poultry flock) could have more than one violation. A bar chart illustration of the first summary table is also included.

The second summary table (for more than one compound in the class) specifies the violations and chemical residue that were detected within the compound class. Additional information is included in the violation report.

The detailed tables, each per compound class, present the tissues analyzed, number of samples analyzed, number of violations, and the range for the amount detected for each compound tested in each production class. The number of positives and violations are reported in intervals, with the lowest interval being 0.01-0.10 parts per million (ppm) or 0.01-0.10 parts per billion (ppb). If samples did not contain detectable residues, then the samples are categorized under "None" for "chemical residue levels found in samples." The no-detect level varies for each analyte and is not <0.01 ppm or <0.01 ppb for every analyte. The minimum proficiency level may be found in Appendix I (Analytical Methods, 2008 National Residue Program). For some production class categories, the detailed table might include two columns indicating instances when samples were analyzed and residues were detected but not quantitated (violative or non-violative).

ANTIBIOTICS (7-plate bioassay)

FSIS analyzed 4,146 samples for antibiotic residues. Two (2) violations were detected, and 276 non-violative positives were detected. The residue violations consisted of one (1) oxytetracycline, and one (1) gentamycin. Table 6a, *Antibiotics,* presents the results of the testing by production class. Table 6b, *Specific Antibiotic Violative Residues,* presents the specific Antibiotics detected.

Table 6a
Residue Data-Antibiotics (7-plate bioassay)
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Boars/Stags	296	22	0	0.00
Bob veal	253	20	1	0.40
Bulls	292	2	0	0.00
Dairy cows	246	2	0	0.00
Ducks	57	0	0	0.00
Formula-fed veal	302	29	0	0.00
Goats	85	1	1	1.18
Heavy calves	100	0	0	0.00
Heifers	300	2	0	0.00
Lambs	251	6	0	0.00
Market hogs	323	31	0	0.00
Mature sheep	62	0	0	0.00
Non-formula-fed veal	102	6	0	0.00
Rabbits	57	36	0	0.00
Roaster pigs	289	87	0	0.00
Sows	223	13	0	0.00
Steers	318	0	0	0.00
Young Chickens	296	4	0	0.00
Young Turkeys	294	15	0	0.00
Total	4146	276	2	0.05

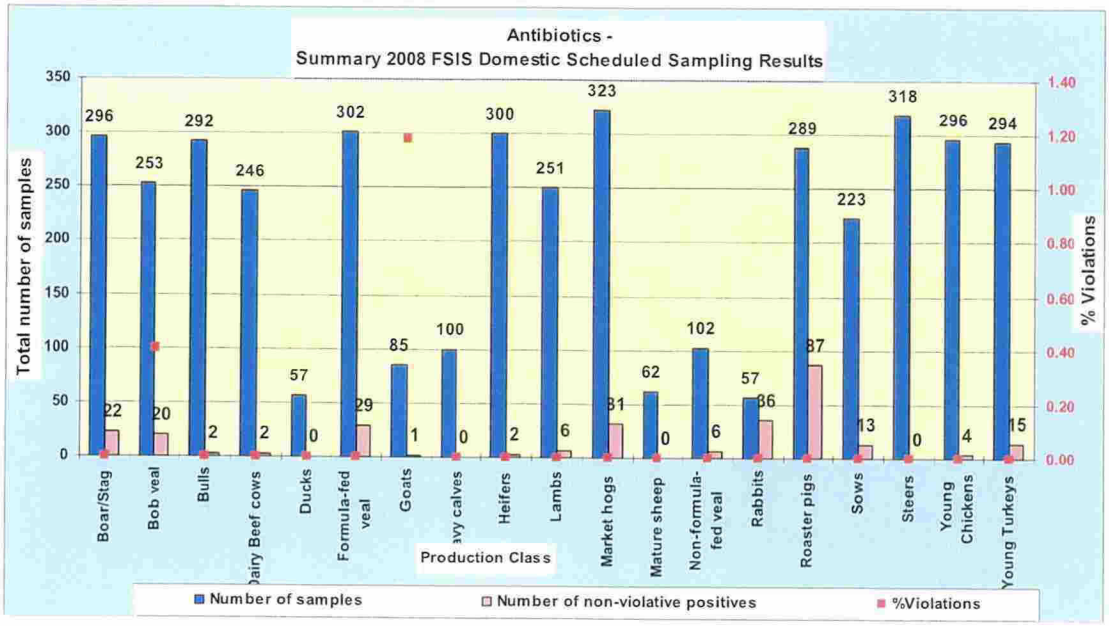


Table 6b
Specific Antibiotics Violative Residues
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Antibiotic Compounds		Total
	Gentamycin-Sulfate	Oxytetra-cycline	
Bob veal	1	0	1
Goats	0	1	1
Total	**1**	**1**	**2**

Violation Report- Antibiotics per Production Class
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound Class	Residue	Tissue	Result (ppm)
Bob veal	Antibiotics	Gentamycin -Sulfate	Kidney	8888*
Goats	Antibiotics	Oxytetracycline	Kidney	4.66

Note: *8888* value indicates the result is violative, but not quantified. The residue levels were not determined because any amount of the identified residue constitutes a violation.

Table 6c
Antibiotics Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

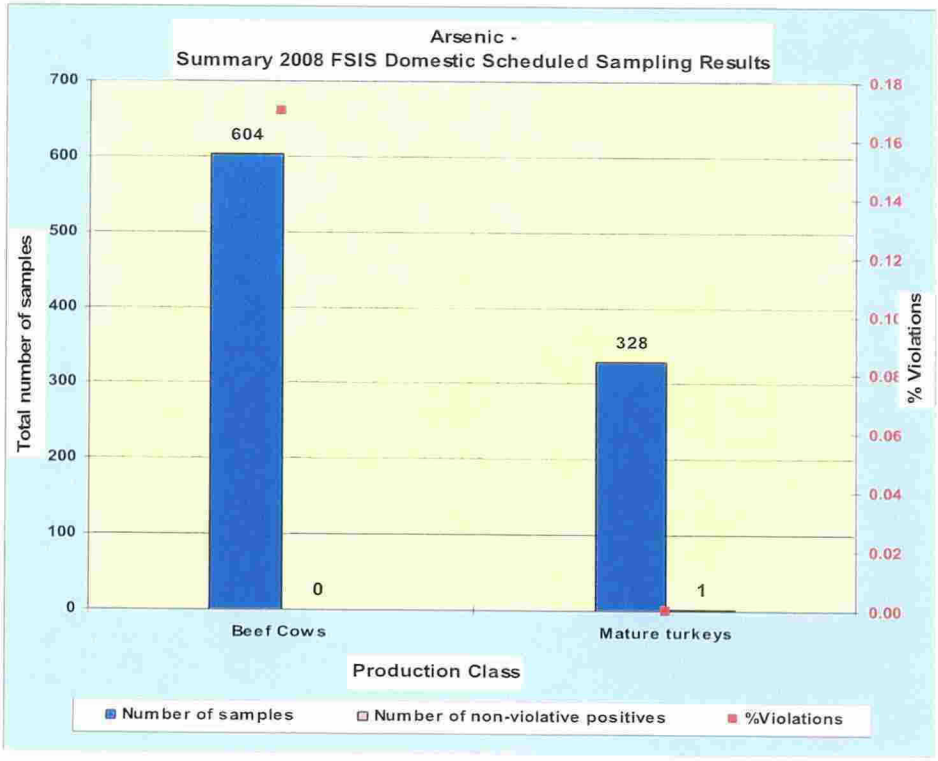
Production class	Tissue	Total number of samples	Violations	Antibiotics levels (ppm) found in samples										
				NONE	0.01-0.10	0.11-0.20	0.21-0.30	0.31-0.50	0.51-1.00	1.01-2.51	2.51-5.00	> 5.00	Non-Quantitative Non-violative	Non-Quantitative Violative
Boar/Stags	Kidney	296	0	274	-	-	-	2	-	-	-	-	20	-
Bob veal	Kidney	253	1	227	-	-	-	-	-	4	1	5	15	1
Bulls	Kidney	292	0	290	-	-	-	-	-	-	-	-	2	-
Dairy cow	Kidney	246	0	244	-	-	-	-	1	1	-	-	-	-
Ducks	Kidney	57	0	57	-	-	-	-	-	-	-	-	-	-
Formula-fed veal	Kidney	302	0	273	-	-	3	3	1	-	-	-	22	-
Goats	Kidney	85	1	83	-	-	-	-	-	-	1	-	1	-
Heavy Calves	Kidney	100	0	100	-	-	-	-	-	-	-	-	-	-
Heifers	Kidney	300	0	298	-	-	-	-	1	-	-	-	1	-
Lambs	Kidney	251	0	245	-	-	1	-	1	-	-	-	4	-
Market hogs	Kidney	323	0	292	-	-	-	-	-	-	-	-	31	-
Mature sheep	Kidney	62	0	62	-	-	-	-	-	-	-	-	-	-
Non-formula-fed veal	Kidney	102	0	93	1	-	-	-	1	-	-	-	6	1
Rabbits	Kidney	57	0	21	-	-	-	-	-	-	-	-	36	-
Roaster pigs	Kidney	289	0	202	-	2	3	3	1	2	-	1	75	-
Sows	Kidney	223	0	210	-	-	-	1	-	-	-	-	12	-
Steers	Kidney	318	0	318	-	-	-	-	-	-	-	-	-	-
Young chickens	Kidney	296	0	292	-	-	-	-	-	-	-	-	4	-
Young turkeys	Kidney	294	0	279	-	-	-	1	2	-	-	-	12	-

ARSENIC[1]

FSIS analyzed 604 beef cow samples for arsenic; one (1) violation and zero (0) non-violative positives were detected. FSIS analyzed 328 mature turkey samples for arsenic; zero (0) violations and one (1) non-violative positives were detected. Table 7a, *Arsenic,* presents the results of the testing by production class.

Table 7a
Residue Data-Arsenic
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Beef cows	604	0	1	0.17
Mature turkeys	328	1	0	0.00
Total	**932**	**1**	**1**	0.11



[1] The method reduces organic arsenic to inorganic arsenic prior to quantification. The reported results include both orginal organic and inorganic arsenic species.

Table 7c
Arsenic Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Arsenic levels (ppm) found in samples	
				NONE	0.21-0.30
Beef cows	Liver/Muscle	604	1	604	* 1
Mature turkeys	Liver	328	0	327	1

Violation Report- Arsenic per Production Class
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound Class	Residue	Tissue	Result (ppm)
Beef cows	Arsenic	Arsenic	Liver/Muscle	0.00/0.24*

Note: * The above beef cows sample tested positive for arsenic in muscle (0.24 ppm). This made the sample violative.

Both liver and muscle tissues from the same animal are tested for Arsenic when both tissues are received by the laboratory.

AVERMECTINS (IVERMECTIN and DORAMECTIN) and MILBEMYCINS (MOXIDECTIN)

FSIS analyzed 2,161 samples for avermectin and milbemycin residues. Three (3) violations were detected. The violations consisted of one (1) ivermectin, one (1) doramectin, and one (1) moxidectin. Table 8a, *Avermectins and Milbemycins,* presents the results of the testing by production class. Table 8b, *Specific Avermectin and Milbemycin Violative Residues,* presents the specific avermectins and milbemycins detected.

Table 8a
Residue Data-Avermectins and Milbemycins
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Boars/Stags	287	0	1	0.30
Bulls	272	4	1	0.37
Goats	227	0	0	0.00
Heavy calves	117	1	1	0.85
Lambs	287	1	0	0.00
Mature sheep	213	0	0	0.00
Non-formula-fed veal	99	2	0	0.00
Rabbits	58	0	0	0.00
Roaster pigs	290	0	0	0.00
Sows	311	0	0	0.00
Total	**2,161**	**8**	**3**	0.14

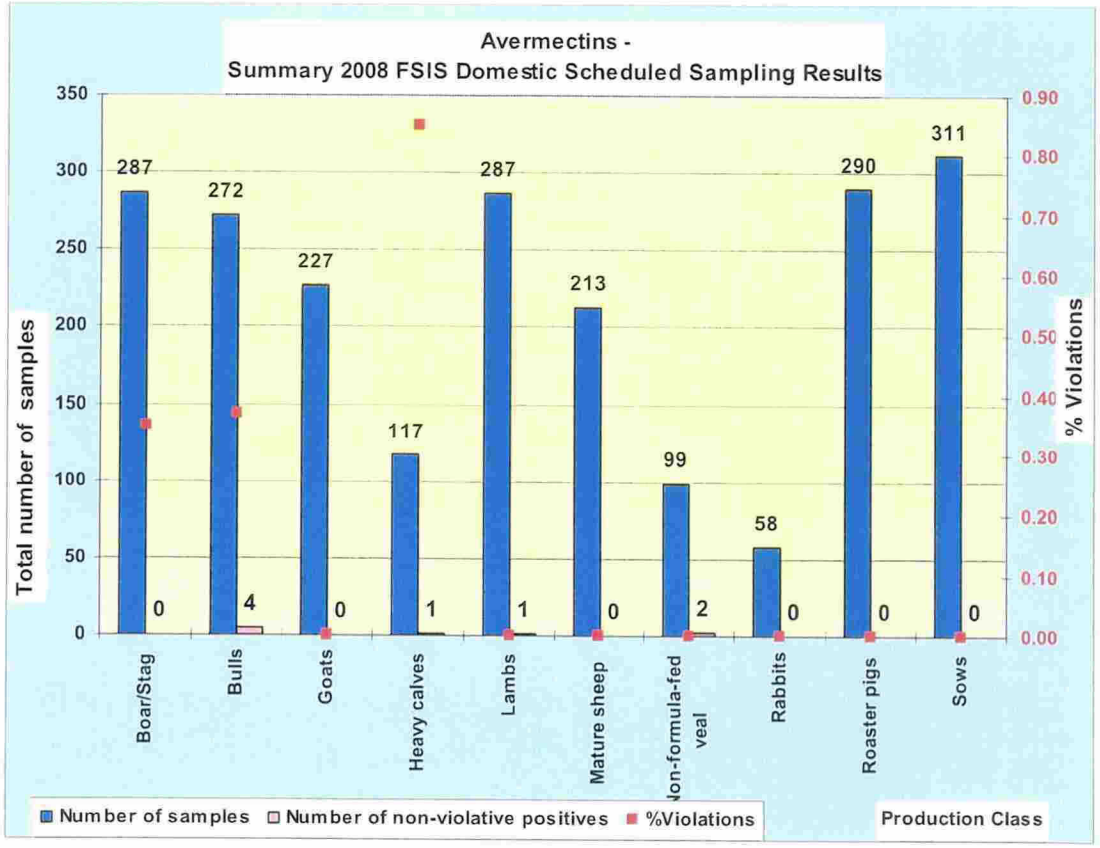


Table 8b
Specific Avermectins and Milbemycins Violative Residues
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Avermectin and Milbemycin Compounds			Total
	Doramectin	Ivermectin	Moxidectin	
Boars/Stags	0	1	0	**1**
Bulls	0	0	1	**1**
Heavy calves	1	0	0	**1**
Total	**1**	**1**	**1**	**3**

Table 8c
Avermectins and Milbemycins Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Avermectins and Milbemycins levels (ppb) found in samples	
				NONE	> 5.00
Boars/Stags	Liver	287	1	286	1
Bulls	Liver	272	1	264	8
Goats	Liver	227	0	227	-
Heavy calves	Liver	117	1	115	2
Lambs	Liver	287	0	286	1
Mature sheep	Liver	213	0	213	-
Non-formula fed veal	Liver	99	0	97	2
Rabbits	Liver	58	0	58	-
Roaster pigs	Liver	290	0	290	-
Sows	Liver	311	0	311	-

Violation Report- Avermectins and Milbemycins per Production Class
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound Class	Residue	Tissue	Result (ppb)
Boars/Stags	Avermectins	Ivermectin	Liver	23.9
Bulls	Milbemycins	Moxidectin	Liver	89.13
Heavy calves	Avermectins	Doramectin	Liver	164.9

beta –AGONISTS (clenbuterol, cimaterol, ractopamine, salbutamol , and zilpaterol)

FSIS analyzed 221 goat, 310 market hog, and 111 Non-formula-fed veal samples for *beta*-agonists residues. Zero (0) violations and five (5) non-violative positives were found for ractopamine. Table 9a, *beta-Agonists,* presents the results of the testing by production class.

Table 9a
Residue Data-beta –Agonists
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Goats	221	0	0	0.00
Market hogs	310	5	0	0.00
Non-formula-fed veal	111	0	0	0.00
Total	**642**	**5**	**0**	0.00

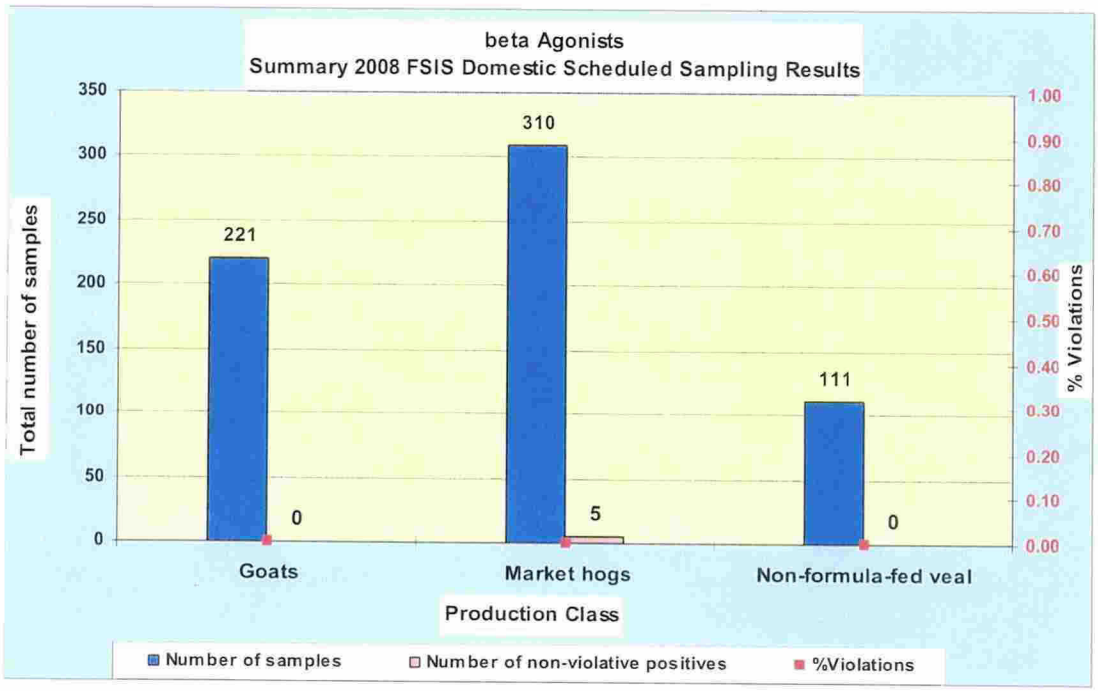


Table 9c
beta-Agonists Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	beta-Agonists levels (ppb) found in samples	
				NONE	> 5.00
Goats	Liver	221	0	221	-
Market hogs	Liver	310	0	305	5
Non-formula fed veal	Liver	111	0	111	-

CARBADOX

FSIS analyzed 305 market hog samples for carbadox; one (1) violation and zero (0) non-violative positives were detected. FSIS analyzed 267 roaster pig samples for carbadox, three (3) violation and three (3) non-violative positives were detected. Table 10a, *Carbadox,* presents the results of the testing by production class. Table 10b, Specific Carbadox Violative Residues detected.

Table 10a
Residue Data-Carbadox
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Market hogs	305	0	1	0.33
Roaster pigs	267	3	3	1.12
Total	**572**	**3**	**4**	0.70

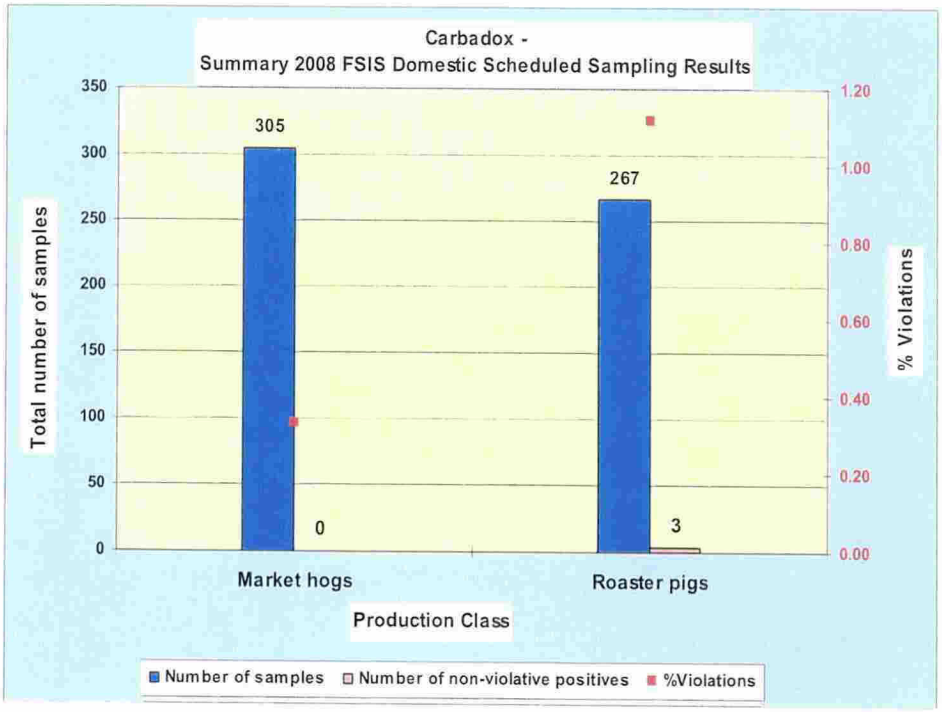


Table 10c
Carbadox Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Carbadox levels (ppb) found in samples	
				NONE	> 5.00
Market hogs	Liver	305	1	304	1
Roaster pigs	Liver	267	3	261	6

Violation Report- Carbadox per Production Class
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound Class	Residue	Tissue	Result (ppb)
Market hogs	Carbadox	Carbadox	Liver	47
Roaster pigs	Carbadox	Carbadox	Liver	38
Roaster pigs	Carbadox	Carbadox	Liver	69
Roaster pigs	Carbadox	Carbadox	Liver	110

CHLORAMPHENICOL

FSIS analyzed 1,588 samples for chloramphenicol and no violations were detected. Table 11a, *Chloramphenicol,* presents the results of the testing by production class. Zero (0) violations were detected, and zero (0) non-violative positives were detected by production class.

Table 11a
Residue Data-Chloramphenicol
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Bob veal	311	0	0	0.00
Heifers	298	0	0	0.00
Mature chickens	332	0	0	0.00
Mature turkeys	330	0	0	0.00
Steers	317	0	0	0.00
Total	**1,588**	**0**	**0**	**0.00**

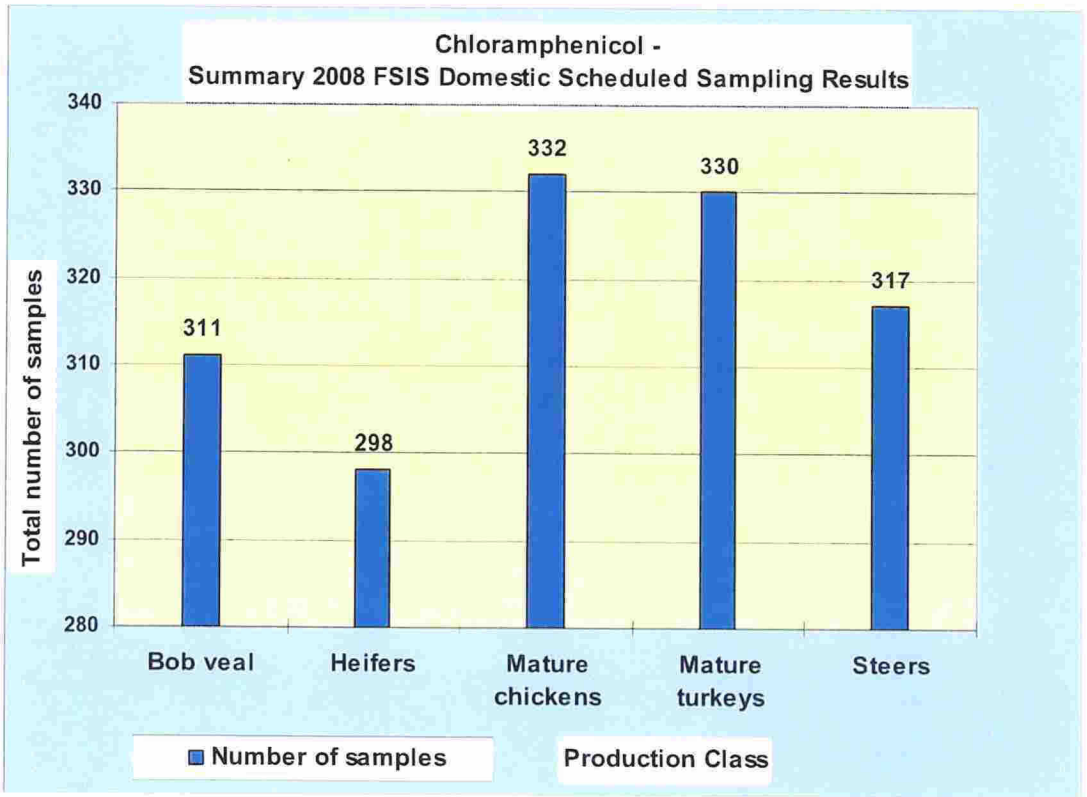


Table 11c
Chloramphenicol Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Chloramphenicol levels (ppb) found in samples
				NONE
Bob veal	Muscle	311	0	311
Heifers	Muscle	298	0	298
Mature chickens	Muscle	332	0	332
Mature turkeys	Muscle	330	0	330
Steers	Muscle	317	0	317

CHLORINATED HYDROCARBONS and CHLORINATED ORGANOPHOSPHATES

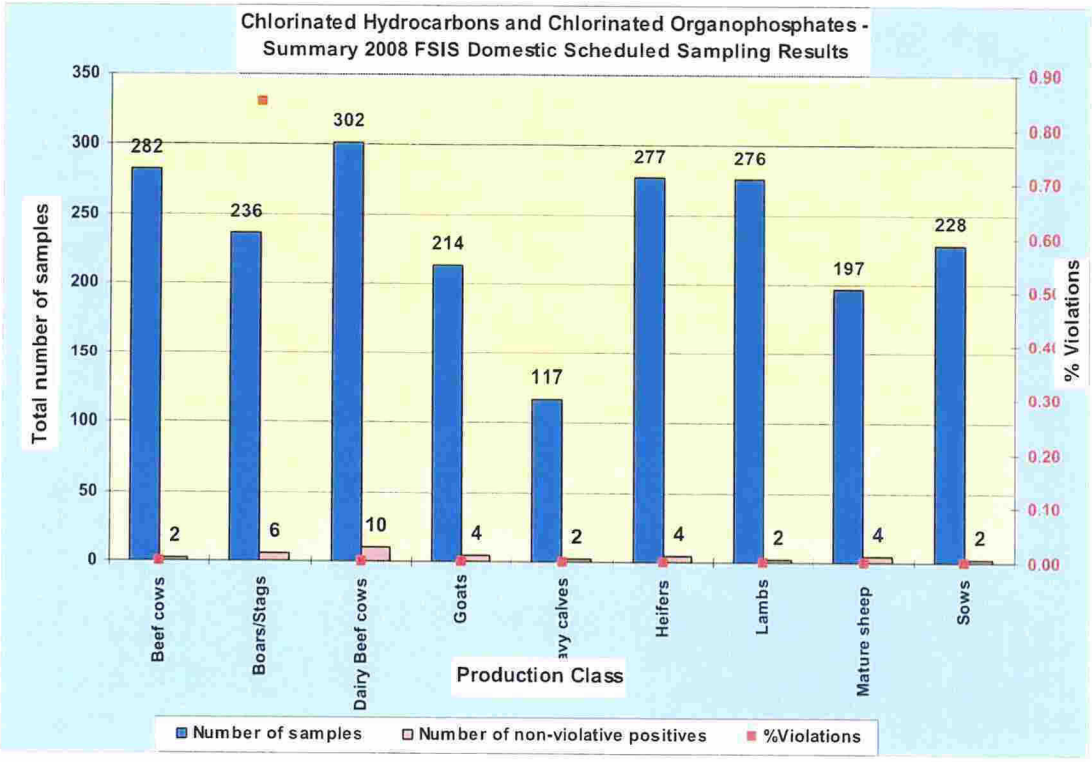
FSIS analyzed 2,129 samples for chlorinated hydrocarbons and chlorinated organophosphates residues. Two (2) violations were detected. One (1) Hexachlorobenzene and one (1) Mirex. Table 12a, *Chlorinated Hydrocarbons and Chlorinated Organophosphates,* presents the results of the testing by production class. Table 12b, *Specific Chlorinated Hydrocarbons and Chlorinated Organophosphates,* presents the specific chlorinated hydrocarbons and chlorinated organophosphates detected.

Table 12a
Residue Data-Chlorinated Hydrocarbons and Chlorinated Organophosphates
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Beef cows	282	2	0	0.00
Boars/Stags	236	6	2	0.85
Dairy cows	302	10	0	0.00
Goats	214	4	0	0.00
Heavy calves	117	2	0	0.00
Heifers	277	4	0	0.00
Lambs	276	2	0	0.00
Mature sheep	197	4	0	0.00
Sows	228	2	0	0.00
Total	**2,129**	**36**	**2**	**0.09**

Table 12b
Specific Chlorinated Hydrocarbons and Chlorinated Organophosphates
Violative Residues- 2008 FSIS Domestic Scheduled Sampling Results

Production Class	Chlorinated Hydrocarbons Compounds		Total
	Hexachlorobenzene	Mirex	
Boars/Stags	1	1	2
Total	**1**	**1**	**2**



Violation Report- Chlorinated Hydrocarbons and Chlorinated Organophosphates per Production Class
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound Class	Residue	Tissue	Result (ppm)
Boars/Stags	Chlorinated Hydrocarbons	Hexachlorobenzene	Fat	0.17
Boars/Stags	Chlorinated Hydrocarbons	Mirex	Fat	0.18

Note: * The Chlorinated Hydrocarbons and Chlorinated Organophosphates Residue Levels (summary table) is on Page 30.

Table 12c
Residue Data - Chlorinated Hydrocarbons and Chlorinated Organophosphates
Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Chlorinated Hydrocarbons/ Organophosphates levels (ppm) found in samples							
				NONE	0.01-0.10	0.11-0.20	0.21-0.30	0.31-0.50	0.51-1.00	1.01-2.51	2.51-5.00
Beef cows	Fat	282	0	280	-	1	1	-	-	-	-
Boars/Stags	Fat	236	*2	227	1	4	1	1	1	-	1
Dairy cows	Fat	302	0	292	3	5	1	-	1	-	-
Goats	Fat	214	0	209	-	1	1	1	1	1	-
Heavy calves	Fat	117	0	115	-	1	1	-	-	-	-
Heifers	Fat	277	0	273	1	-	1	-	1	1	-
Lambs	Fat	276	0	274	-	2	-	-	-	-	-
Mature sheep	Fat	197	0	193	-	2	1	1	-	-	-
Sows	Fat	228	0	226	-	-	1	-	-	1	-

Note: * The Chlorinated Hydrocarbons and Chlorinated Organophosphates residue levels violations report is on Page 29.

FLORFENICOL

FSIS analyzed 535 samples for florfenicol residues and (0) violations were detected. Table 13a, *Florfenicol,* presents the results of the testing by production class.

Table 13a
Residue Data-Florfenicol
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Beef cows	206	0	0	0.0
Mature chickens	266	0	0	0.0
Non-formula-fed veal	63	0	0	0.0
Total	**535**	**0**	**0**	0.00

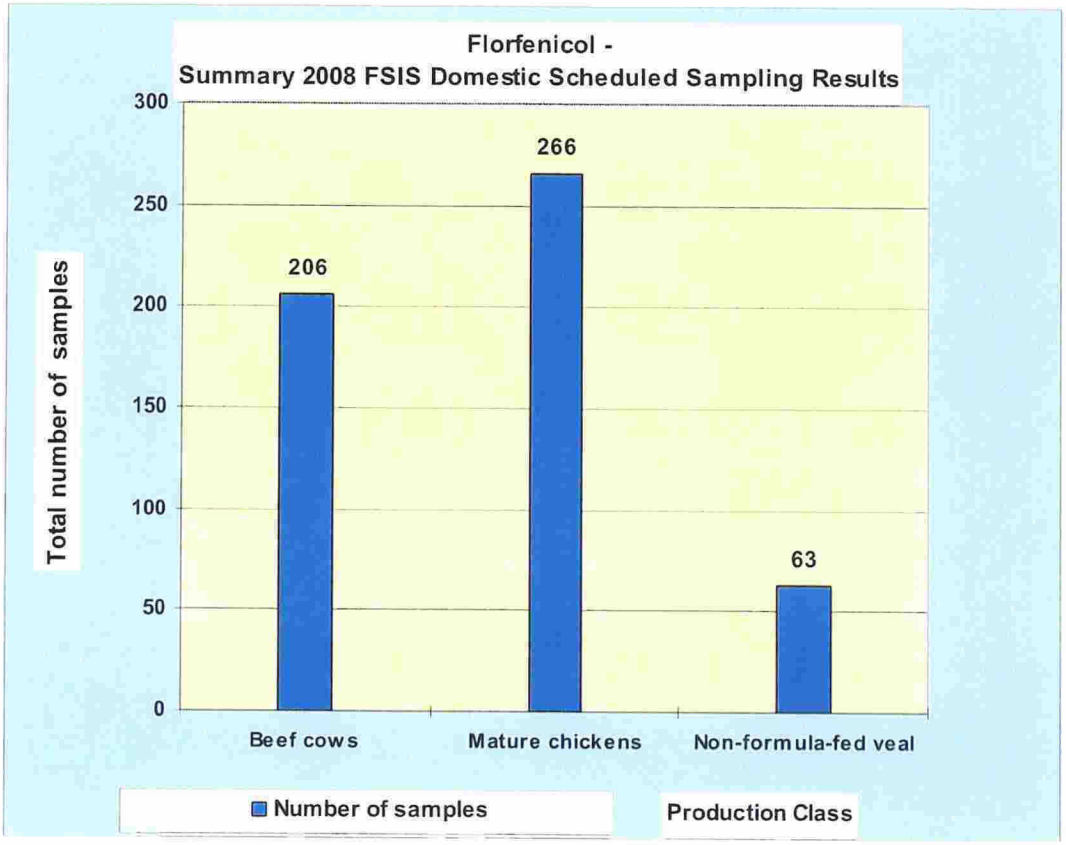


Table 13c
Florfenicol Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Florfenicol levels (ppm) found in samples-
				NONE
Beef cows	Liver	206	0	206
Mature chickens	Liver	266	0	266
Non-formula fed veal	Liver	63	0	63

FLUNIXIN

FSIS analyzed 174 samples for flunixin residues and (0) violations were detected. Table 14a, *Flunixin,* presents the results of the testing by production class.

Table 14a
Residue Data-Flunixin
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Bulls	84	0	0	0.00
Dairy cows	90	0	0	0.00
Total	**174**	**0**	**0**	0.00

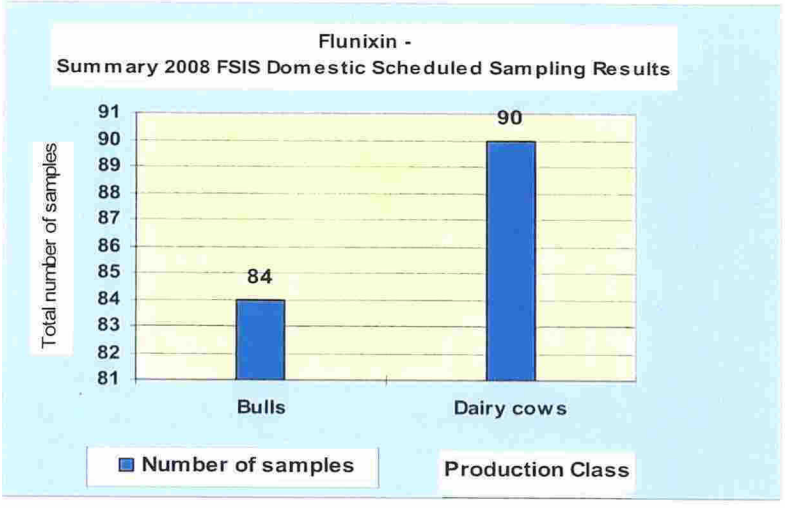


Table 14c
Flunixin Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Flunixin levels (ppb) found in samples
				NONE
Bulls	Liver	84	0	84
Dairy cows	Liver	90	0	90

MELENGESTROL ACETATE (MGA)

FSIS analyzed 285 heifer samples for MGA residues; zero (0) violations and zero (0) non-violative positives were found. Table 15a, *Melengestrol Acetate,* presents the results of the testing in heifers.

Table 15a
Residue Data-Melengestrol Acetate (MGA)
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Heifers	285	13	0	0.00
Total	**285**	**13**	**0**	0.00

Table 15c
MGA (ppb) Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	MGA levels (ppb) found in samples	
				NONE	10-15
Heifers	Fat	285	0	272	13

NITROFURANS

FSIS analyzed 835 samples for nitrofuran (furazolidone and furaltadone) residues and no violations were detected. Table16a, *Nitrofurans*, presents the results of the testing by production class.

Table 16a
Residue Data-Nitrofurans
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Dairy cows	237	0	0	0.00
Market hogs	303	0	0	0.00
Sows	295	0	0	0.00
Total	**835**	**0**	**0**	0.00

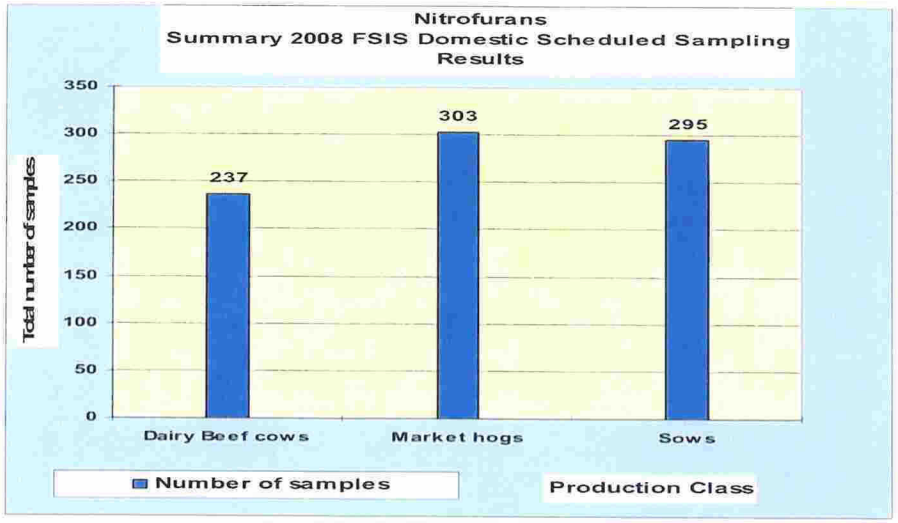


Table 16c
Nitrofurans Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Nitrofurans levels (ppb) found in samples
				NONE
Dairy cows	Liver	237	0	237
Market hogs	Liver	303	0	303
Sows	Liver	295	0	295

NITROIMIDAZOLES

FSIS analyzed 293 young chicken samples for nitroimidazole (hydroxyipronidazone and hydoxydimetridazole) residues; zero (0) violations and zero (0) non-violative residues were detected. Table 17a, *Nitroimidazoles,* presents the results of the testing in young chickens.

Table 17a
Residue Data-Nitroimidazoles
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Young Chickens	293	0	0	0.00
Total	**293**	**0**	**0**	0.00

Table 17c
Nitroimidazoles Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Nitroimidazoles levels (ppm) found in samples
				NONE
Young chickens	Muscle	293	0	293

SULFONAMIDES

FSIS analyzed 2,890 samples for sulfonamides. Eight (8) violations were detected. The chemical residue violations consisted of one (1) sulfamethoxazole, and seven (7) sulfamethazine. Table 18a, *Sulfonamides,* presents the results of the testing by production class. Table 18b, *Specific Sulfonamides Violative Residues,* presents the specific sulfonamides detected.

Table 18a
Residue Data-Sulfonamides
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Bob veal	254	0	1	0.39
Dairy cows	224	0	0	0.00
Goats	233	0	0	0.00
Heavy calves	122	0	1	0.82
Heifers	306	0	1	0.33
Market hogs	223	0	2	0.90
Mature chickens	334	0	0	0.00
Non-formula-fed veal	104	0	1	1.00
Roaster pigs	230	1	0	0.00
Sows	314	0	2	0.64
Steers	252	0	0	0.00
Young Chickens	294	0	0	0.00
Total	**2,890**	**1**	**8**	**0.28**

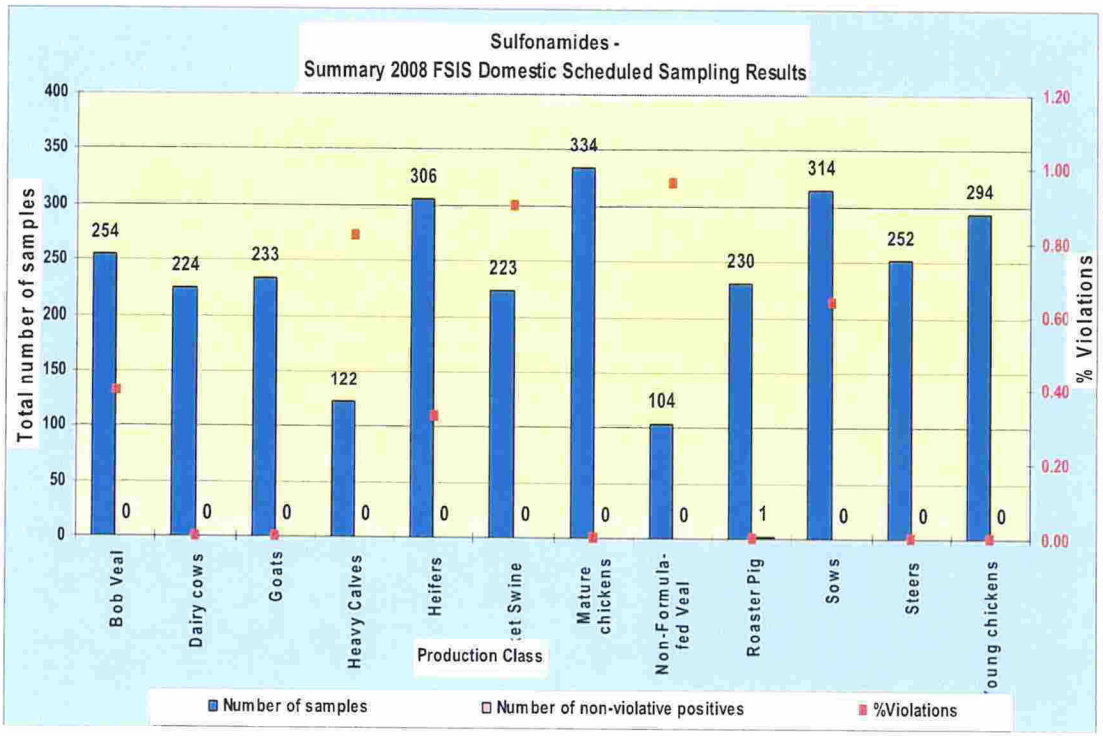


Table 18b
Specific Sulfonamide Violative Residues
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Sulfonamide Compounds		Total
	Sulfamethazine	Sulfamethoxazole	
Bob veal	0	1	1
Heavy calves	1	0	1
Heifers	1	0	1
Market hogs	2	0	2
Non-formula-fed veal	1	0	1
Sows	2	0	2
Total	**7**	**1**	**8**

Table 18c
Sulfonamides Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Sulfonamides levels (ppm) found in samples					
				NONE	0.10-0.20	0.21-0.30	0.31-0.50	0.51-1.00	1.01-2.51
Bob veal	Liver	254	1	253	-	-	-	1	-
Dairy cows	Liver	224	0	224	-	-	-	-	-
Goats	Liver	233	0	233	-	-	-	-	-
Heavy calves	Liver	122	1	121	-	-	-	1	-
Heifers	Liver	306	1	305	-	-	1	-	-
Market hogs	Liver	223	2	221	-	1	1	-	-
Mature chickens	Liver	334	0	334	-	-	-	-	-
Non-formula-fed veal	Liver	104	1	103	1	-	-	-	-
Roaster pigs	Liver	230	0	229	1	-	-	-	-
Sows	Liver	314	2	312	-	-	1	-	1
Steers	Liver	252	0	252	-	-	-	-	-
Young Chickens	Liver	294	0	294	-	-	-	-	-

Violation Report- Sulfonamides Per Production Class
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound Class	Residue	Tissue	Result (ppm)
Bob veal	Sulfonamides	Sulfamethoxazole	Liver	0.6
Heifers	Sulfonamides	Sulfamethazine	Liver	0.31
Market hogs	Sulfonamides	Sulfamethazine	Liver	0.42
Heavy calves	Sulfonamides	Sulfamethazine	Liver	0.75
Sows	Sulfonamides	Sulfamethazine	Liver	1.2
Non-formula fed veal	Sulfonamides	Sulfamethazine	Liver	0.11
Sows	Sulfonamides	Sulfamethazine	Liver	0.31
Market hogs	Sulfonamides	Sulfamethazine	Liver	0.24

THYREOSTATS

FSIS analyzed 313 beef cows. Zero (0) violations and zero (0) non-violative positives were detected. Table 19a, *Thyreostats,* presents the results of the testing in beef cows.

Table 19a
Residue Data-Thyreostats
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Beef cows	313	0	0	0.00
Total	**313**	**0**	**0**	**0.00**

Table 19c
Thyreostats Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Thyreostats levels (ppb) found in samples
				NONE
Beef cows	Muscle	313	0	313

TRENBOLONE

FSIS analyzed 190 samples for trenbolone; zero (0) violations and zero (0) non-violative positives were detected. Table 20a, *Trenbolone,* presents the results of the testing by production class.

Table 20a
Residue Data-Trenbolone
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Formula-fed veal	93	0	0	0.00
Non-formula-fed veal	97	0	0	0.00
Total	**190**	**0**	**0**	0.00

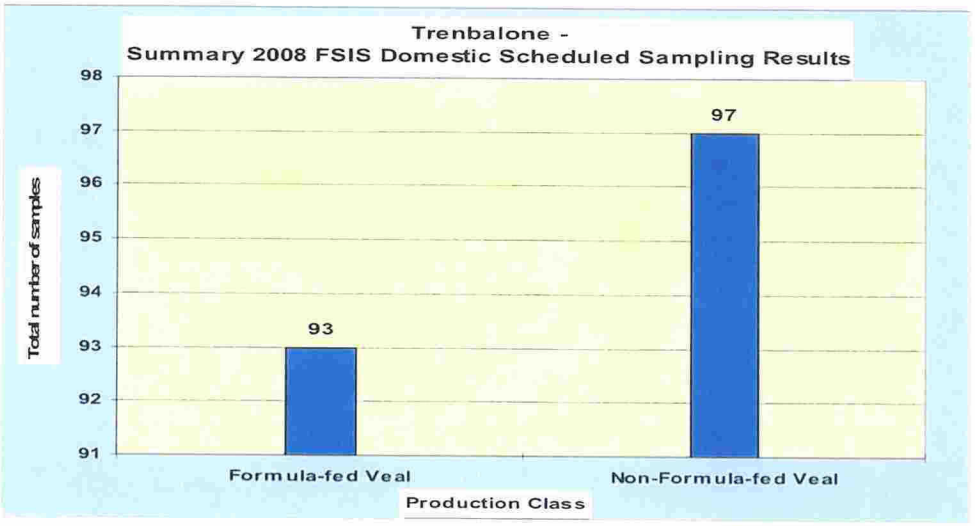


Table 20c
Trenbolone Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Trenbolone levels (ppm) found in samples
				NONE
Formula-fed veal	Liver	93	0	93
Non-formula fed veal	Liver	97	0	97

ZERANOL

FSIS analyzed 191 samples for zeranol residues; zero (0) violations and zero (0) non-violative positives were detected. Table 21a, *Zeranol,* presents the results of the testing by production class.

Table 21a
Residue Data-Zeranol
2008 FSIS Domestic Scheduled Sampling Results

Production Class	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Formula-fed veal	94	0	0	0.00
Non-formula-fed veal	97	0	0	0.00
Total	**191**	**0**	**0**	0.00

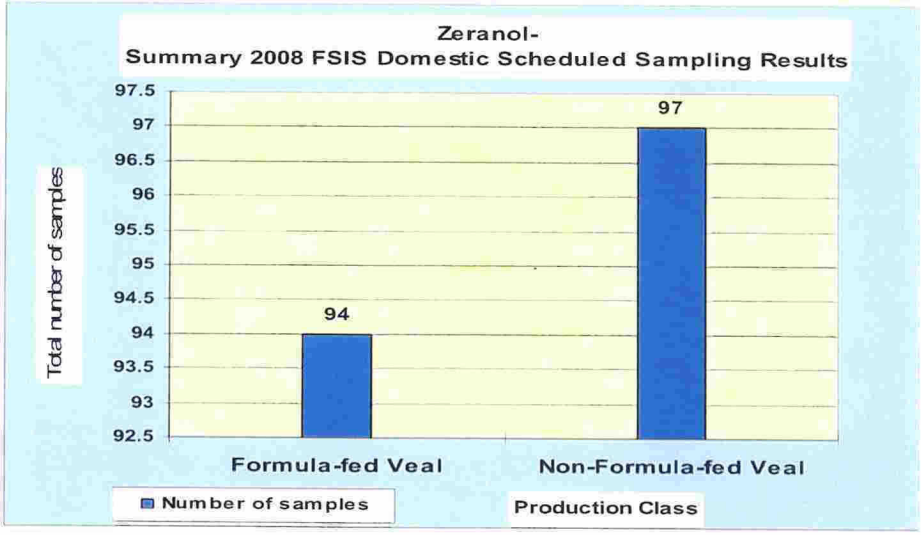


Table 21c
Zeranol Residue Levels
2008 FSIS Domestic Scheduled Sampling Results

Production class	Tissue	Total number of samples	Violations	Zeranol levels (ppb) found in samples
				NONE
Formula-fed veal	Liver	94	0	94
Non-formula fed veal	Liver	97	0	97

SCHEDULED SAMPLING – SAMPLING FOR EXPOSURE ASSESSMENTS, PRODUCTION CLASS DATA (Summary and Detailed Tables)

Tables 22 to 43 identify information as received from the FSIS Database System, Microbiological and Residue Computer Information System (MARCIS). These tables list summary and detailed results by production class.

Domestic scheduled sampling results are presented in summary tables (Tables 22a-43a) in addition to detailed tables (Tables 22b-43b). The summary tables state the total number of samples analyzed, the number of non-violative positives (compounds detected at a level equal to or below the established tolerance), the number of violations, and the percent of violations, for each production class. Since analyses for multiple compounds can be performed on the same sample, one sample (one animal or a composite from one poultry flock) could have more than one violation. A bar chart illustration of the summary table is also included.

The detailed tables present the results from the residue analyses for each production class including: the tissues analyzed, total number of samples analyzed, number of violations, and the range for the amount detected for each compound tested in each production class. The number of positives and violations are reported in intervals, with the lowest interval being 0.01-0.10 ppm or 0.01-0.10 ppb. If samples did not contain detectable residues, then the samples are categorized under "None" for "Residue levels in samples." The no-detect level varies for each analyte and is not <0.01 ppm or <0.01 ppb for every analyte. The minimum proficiency levels may be found in Appendix I (Analytical Methods, 2008 National Residue Program). For some production class categories, the detailed table might include two columns indicating instances when samples were analyzed and residues were detected but not quantitated (violative or non-violative). Additional information is included in the violation report.

SCHEDULED SAMPLING
SAMPLING FOR EXPOSURE ASSESSMENTS
PRODUCTION CLASS DATA (Summary and Details)

Beef cows

FSIS analyzed 1405 samples from Beef cows. One residue violation was detected. The residue violation consisted of Arsenic. Table 22a *Beef cows,* summarizes the results of the testing by compound class.

Table 22a
Residue Data Summary- Beef Cow
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Arsenic	ppm	Liver	604	0	1	0.17
Chlorinated Hydrocarbons	ppm	Fat	282	2	0	0.00
Florfenicol	ppm	Liver	206	0	0	0.00
Thyreostats	ppb	Muscle	313	0	0	0.00
TOTAL			**1,405**	**2**	**1**	**0.07**

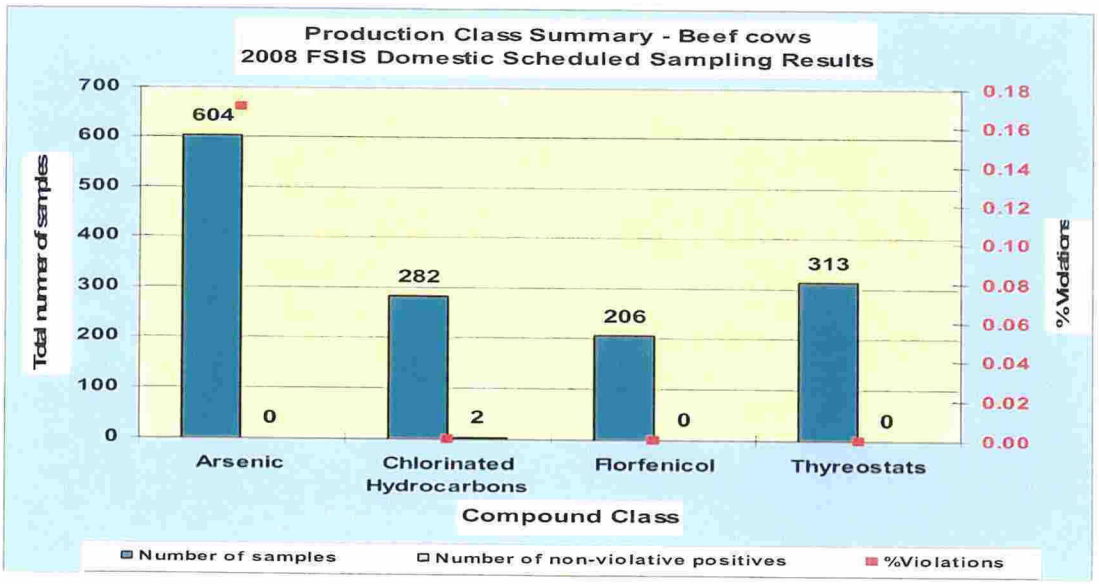


Table 22b
Chemical Residue Levels- Beef cows
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples		
					NONE	0.11-0.20	0.21-0.30
Arsenic	ppm	Liver/Muscle	604	1	604	-	*1
Chlorinated Hydrocarbons	ppm	Fat	282	0	280	1	1
Florfenicol	ppm	Liver	206	0	206	-	-
Thyreostats	ppb	Muscle	313	0	313	-	-

Violation Report- Beef cows
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Beef cows	Arsenic	Arsenic	Liver/Muscle	0.00/0.24*	ppm

*Note: The above beef cow sample tested positive for arsenic in muscle (0.24 ppm). This made the sample violative.

Both liver and muscle tissues from the same animal are tested for Arsenic when both tissues are received by the laboratory.

Boars/Stags

FSIS analyzed 819 Boars/Stags samples. Three (3) residue violations were detected. The residue violations consisted of one (1) Ivermectin, one (1) Hexachlorobenzene, and one (1) Mirex. Table 23a *Boars/Stags,* summarizes the results of the testing by compound class.

Table 23a
Residue Data Summary- Boars/Stags
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	296	22	0	0.00
Avermectins	ppb	Liver	287	0	1	0.35
Chlorinated Hydrocarbons	ppm	Fat	236	6	2	0.85
TOTAL			**819**	**28**	**3**	**0.37**

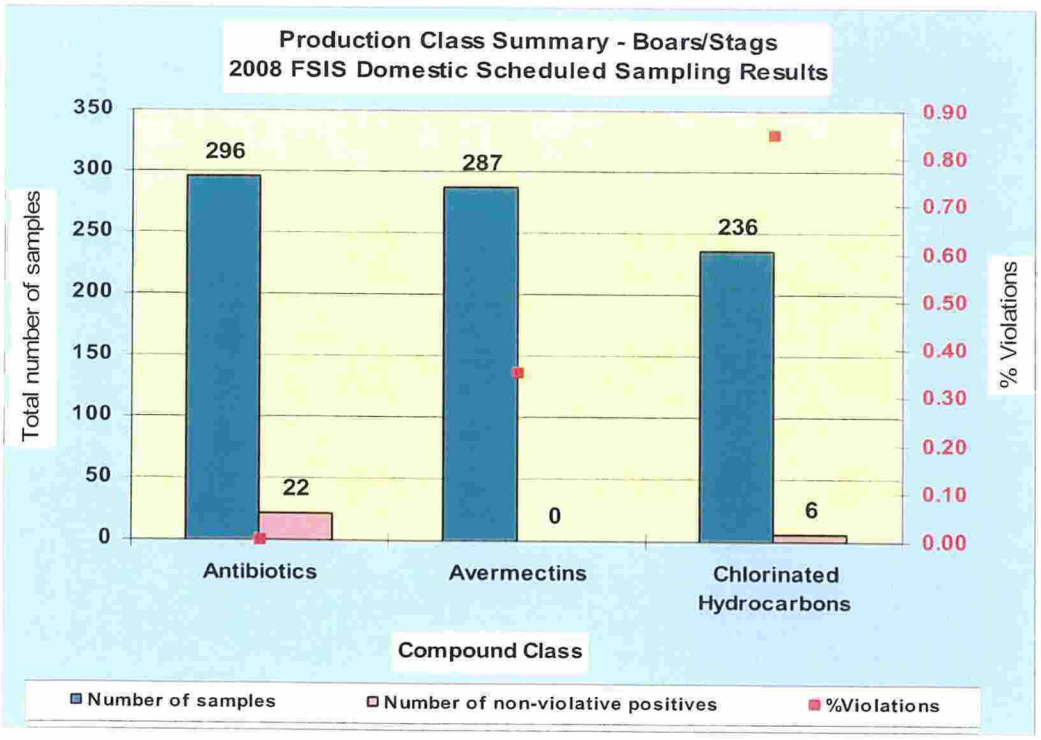


Table 23b
Chemical Residue Levels -Boars/Stags
2008 FSIS Domestic Scheduled Sampling Results

Compound Class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples								
					NONE	0.01-0.10	0.11-0.20	0.21-0.30	0.31-0.50	0.51-1.00	2.51-5.00	> 5.00	Non-Quanti * Non-Vio**
Antibiotics	ppm	Kidney	296	0	274	-	-	-	2	-	-	-	20
Avermectins	ppb	Liver	287	1	286	-	-	-	-	-	-	1	-
Chlorinated Hydrocarbons	ppm	Fat	236	*2	227	1	4	1	1	1	1	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Violation Report- Boars/Stags
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Boars/Stags	Avermectins	Ivermectin	Liver	23.9	ppb
Boars/Stags	Chlorinated Hydrocarbons	Hexachlorobenzene	Fat	0.17	ppm
Boars/Stags	Chlorinated Hydrocarbons	Mirex	Fat	0.18	ppm

Bob veal

FSIS analyzed 818 samples from Bob veal. Two (2) residue violations were detected. One (1) Gentamycin Sulfate and one (1) Sulfamethoxazole. Table 24a *Bob veal,* summarizes the results of the testing by compound class.

Table 24a
Residue Data Summary- Bob veal
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	253	20	1	0.40
Chloramphenicol	ppb	Muscle	311	0	0	0.00
Sulfonamides	ppm	Liver	254	0	1	0.39
TOTAL			**818**	**20**	**2**	**0.24**

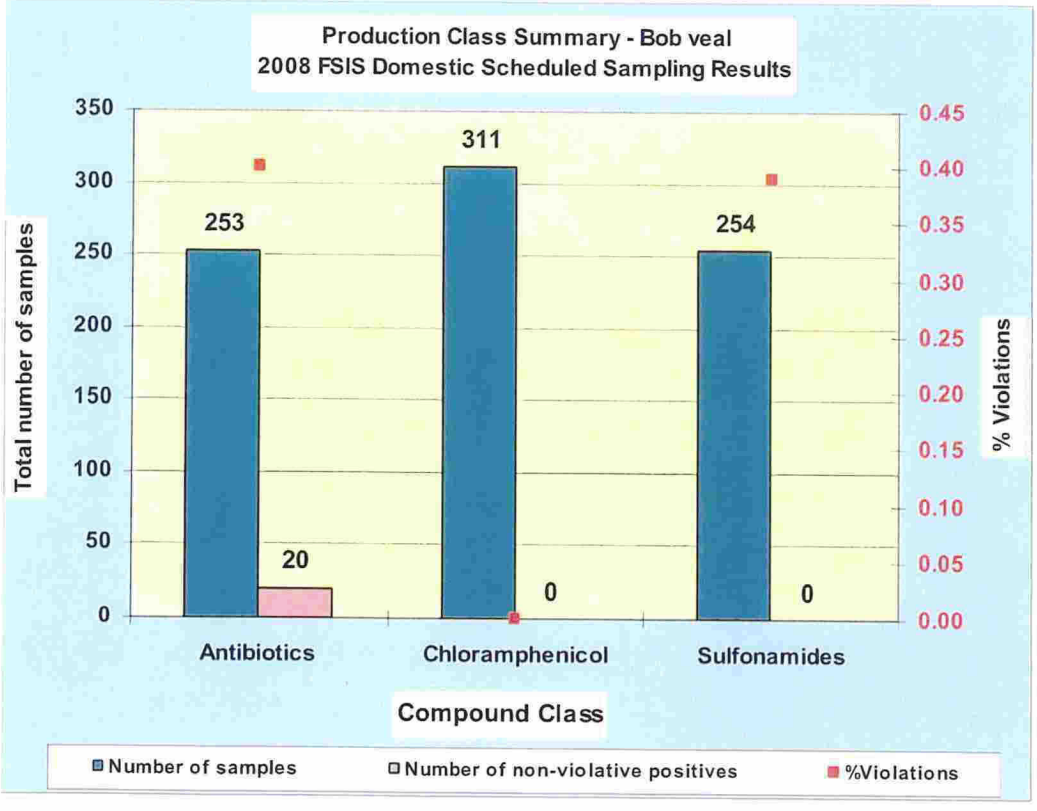


Table 24b
Chemical Residue Levels -Bob veal
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples						
					NONE	0.5-1.00	1.01-2.51	2.51-5.00	> 5.00	Non-Quanti* Non-Vio**	Non-Quanti * Vio***
Antibiotics	ppm	Kidney	253	1	227	-	4	1	5	15	1
Chloramphenicol	ppb	Muscle	311	0	311	-	-	-	-	-	-
Sulfonamides	ppm	Liver	254	1	253	1	-	-	-	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.
*** "Vio" means violative.

Violation Report- Bob veal
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Bob veal	Antibiotics	Gentamycin Sulfate	Kidney	8888*	ppm
Bob veal	Sulfonamides	Sulfamethoxazole	Liver	0.6	ppm

Note: *8888* value indicates the result is violative, but not quantified. The residue levels were not determined because any amount of the identified residue constitutes a violation.

Bulls

FSIS analyzed 648 Bulls samples. One residue violation was detected for "Moxidectin". Table 25a *Bulls* summarizes the results of the testing by compound class.

Table 25a
Residue Data Summary- Bulls
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	292	2	0	0.00
Avermectins	ppb	Liver	272	4	1	0.37
Flunixin	ppb	Liver	84	0	0	0.00
TOTAL			**648**	**6**	**1**	**0.15**

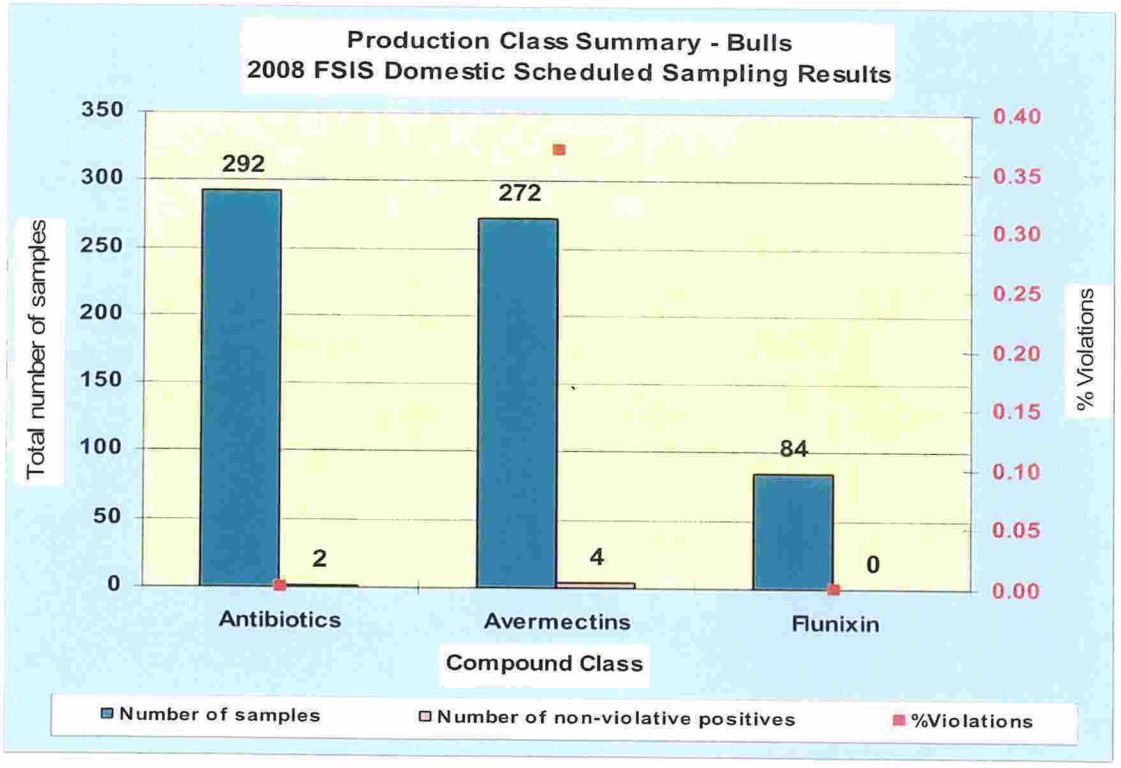


Table 25b
Chemical Residue Levels -Bulls
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples		
					NONE	> 5.00	Non-Quanti* Non-Vio**
Antibiotics	ppm	Kidney	292	0	290	-	2
Avermectins	ppb	Liver	272	1	264	8	-
Flunixin	ppb	Liver	84	0	84	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Violation Report- Bulls
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Bulls	Milbemycins	Moxidectin	Liver	89.13	ppb

Dairy cows

FSIS analyzed 1,099 samples from Dairy cows. No residue violations were detected. Table 26a *Dairy cows,* summarizes the results of the testing by compound class.

Table 26a
Residue Data Summary- Dairy cows
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	246	2	0	0.00
Chlorinated Hydrocarbons	ppm	Fat	302	10	0	0.00
Flunixin	ppb	Liver	90	0	0	0.00
Furaltadone	ppb	Liver	237	0	0	0.00
Sulfonamides	ppm	Liver	224	0	0	0.00
TOTAL			**1,099**	**12**	**0**	**0.00**

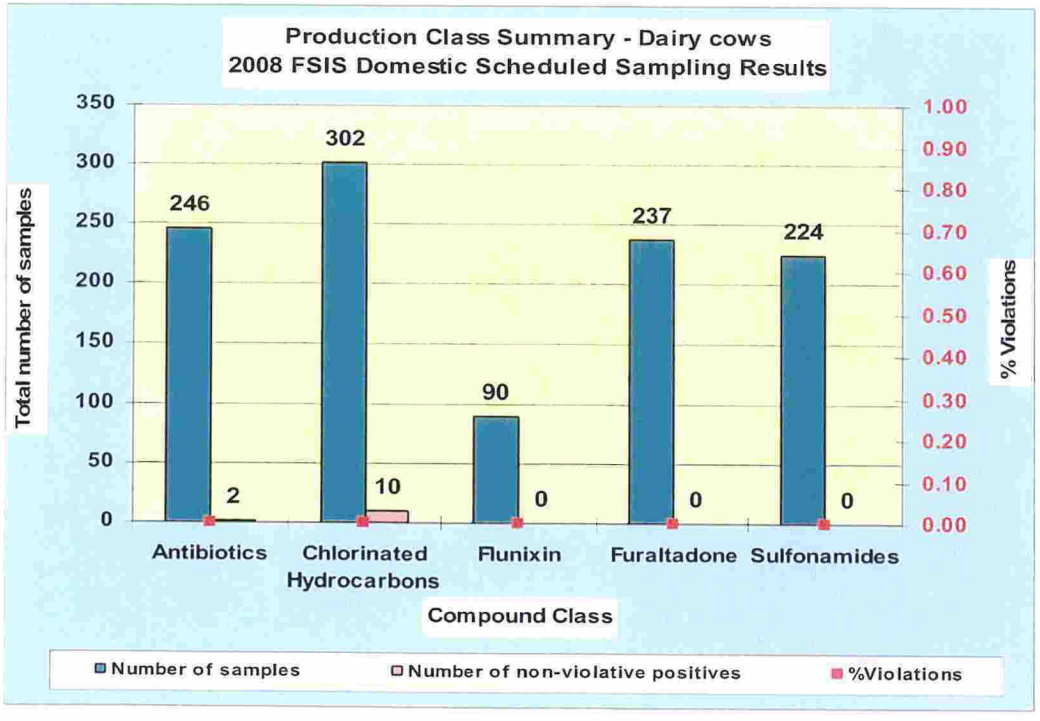


Table 26b
Chemical Residue Levels - Dairy cows
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples					
					NONE	0.0-0.10	0.1-0.20	0.21-0.30	0.51-100	1.01-2.51
Antibiotics	ppm	Kidney	246	0	244	-	-	-	1	1
Chlorinated Hydrocarbons	ppm	Fat	302	0	292	3	5	1	1	-
Flunixin	ppb	Liver	90	0	90	-	-	-	-	-
Furaltadone	ppb	Liver	237	0	237	-	-	-	-	-
Sulfonamides	ppm	Liver	224	0	224	-	-	-	-	-

Ducks

FSIS analyzed 57 Ducks samples. No residue violations were detected. Table 27a *Ducks,* summarizes the results of the testing by compound class.

Table 27a
Residue Data Summary- Ducks
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	57	0	0	0.00
TOTAL			**57**	**0**	**0**	**0.00**

Table 27b
Chemical Residue Levels -Ducks
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples
					NONE
Antibiotics	ppm	Kidney	57	0	57

Formula-fed veal

FSIS analyzed 489 samples from Formula-fed veal. No residue violations were detected. Table 28a *Formula-fed veal,* summarizes the results of the testing by compound class.

Table 28a
Residue Data Summary- Formula-fed veal
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	302	29	0	0.00
Trenbalone	ppm	Liver	93	0	0	0.00
Zeranol	ppb	Liver	94	0	0	0.00
TOTAL			**489**	**29**	**0**	**0.00**

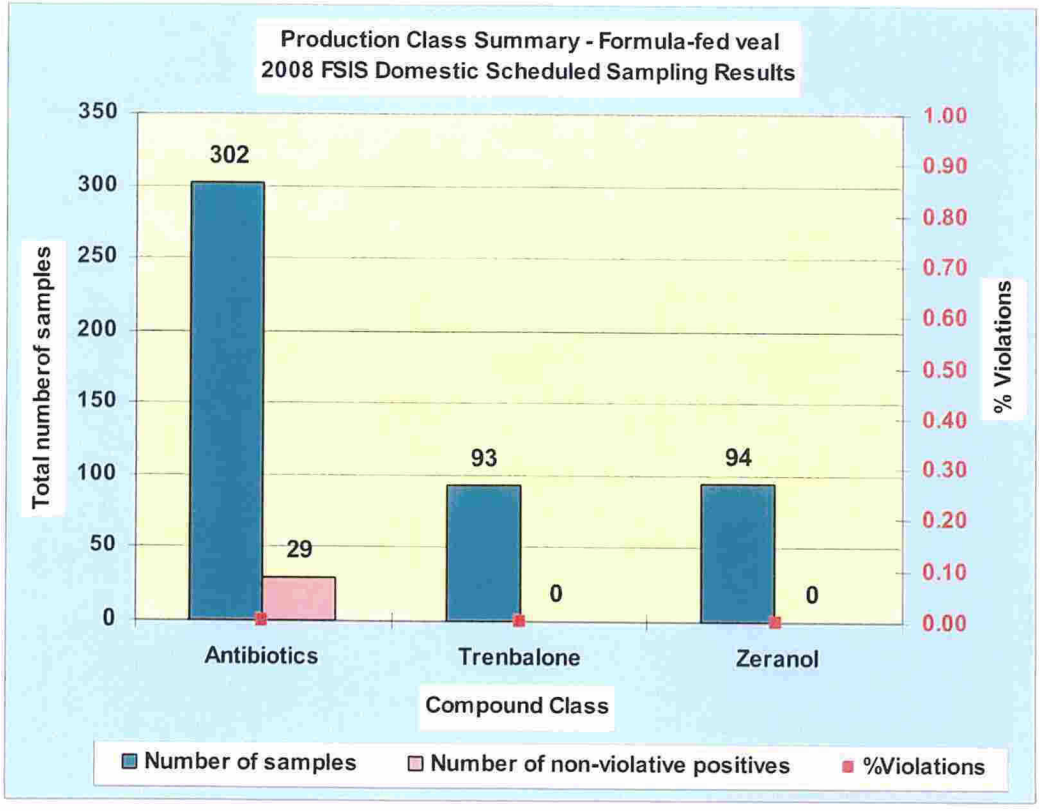


Table 28b
Chemical Residue Levels -Formula-fed veal
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples				
					NONE	0.21 - 0.30	0.31 - 0.50	0.51 - 1.00	Non-Quanti* Non-Vio**
Antibiotics	ppm	Kidney	302	0	273	3	3	1	22
Trenbalone	ppm	Liver	93	0	93	-	-	-	-
Zeranol	ppb	Liver	94	0	94	-	-	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Goats

FSIS analyzed 980 Goats samples. One residue violation was detected: "Oxytetracycline". Table 29a *Goats,* summarizes the results of the testing by compound class.

Table 29a
Residue Data Summary- Goats
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	85	1	1	1.18
Avermectins	ppb	Liver	227	0	0	0.00
Chlorinated Hydrocarbons	ppm	Fat	214	4	0	0.00
Sulfonamides	ppm	Liver	233	0	0	0.00
beta Agonists	ppb	Liver	221	0	0	0.00
TOTAL			**980**	**5**	**1**	**0.10**

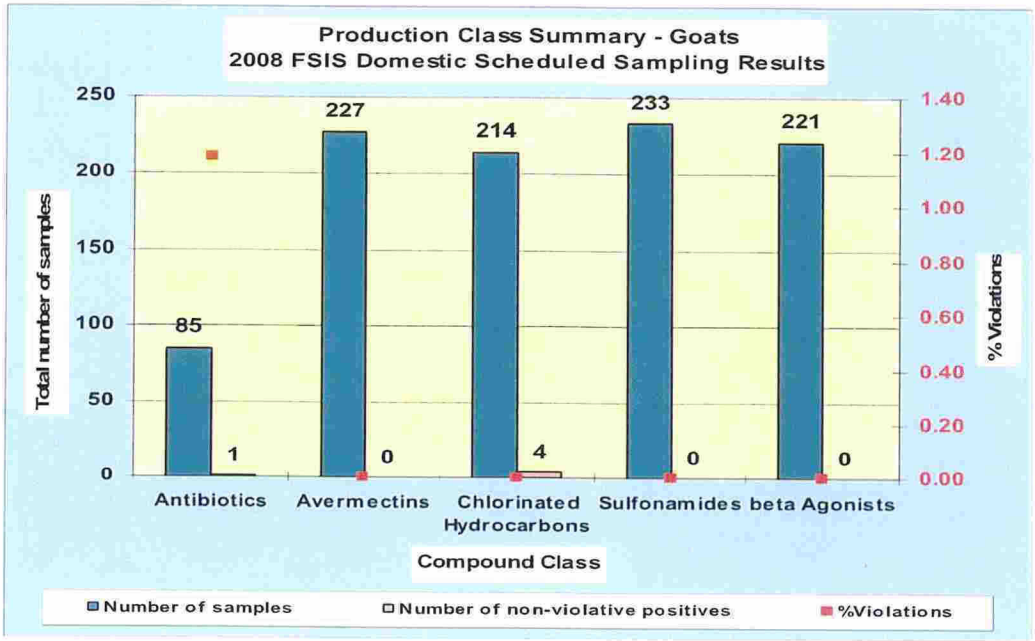


Table 29b
Chemical Residue Levels -Goats
2008 FSIS Domestic Scheduled Sampling Results

Compound Class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples							
					NONE	0.11-0.20	0.21-0.30	0.31-0.50	0.51-1.00	1.01-2.51	2.51-5.00	Non-Quanti* Non-Vio**
Antibiotics	ppm	Kidney	85	1	83	-	-	-	-	-	1	1
Avermectins	ppb	Liver	227	0	227	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	ppm	Fat	214	0	209	1	1	1	1	1	-	-
Sulfonamides	ppm	Liver	233	0	233	-	-	-	-	-	-	-
beta Agonists	ppb	Liver	221	0	221	-	-	-	-	-	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Violation Report- Goats
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Goats	Antibiotics	Oxytetracycline	Kidney	4.66	ppm

Heavy calves

FSIS analyzed 456 samples from Heavy calves. Two residue violations were detected. One (1) Doramectin and one (1) Sulfamethazine. Table 30a *Heavy calves,* summarizes the results of the testing by compound class.

Table 30a
Residue Data Summary– Heavy calves
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	100	0	0	0.00
Avermectins	ppb	Liver	117	1	1	0.85
Chlorinated Hydrocarbons	ppm	Fat	117	2	0	0.00
Sulfonamides	ppm	Liver	122	0	1	0.82
TOTAL			**456**	**3**	**2**	**0.44**

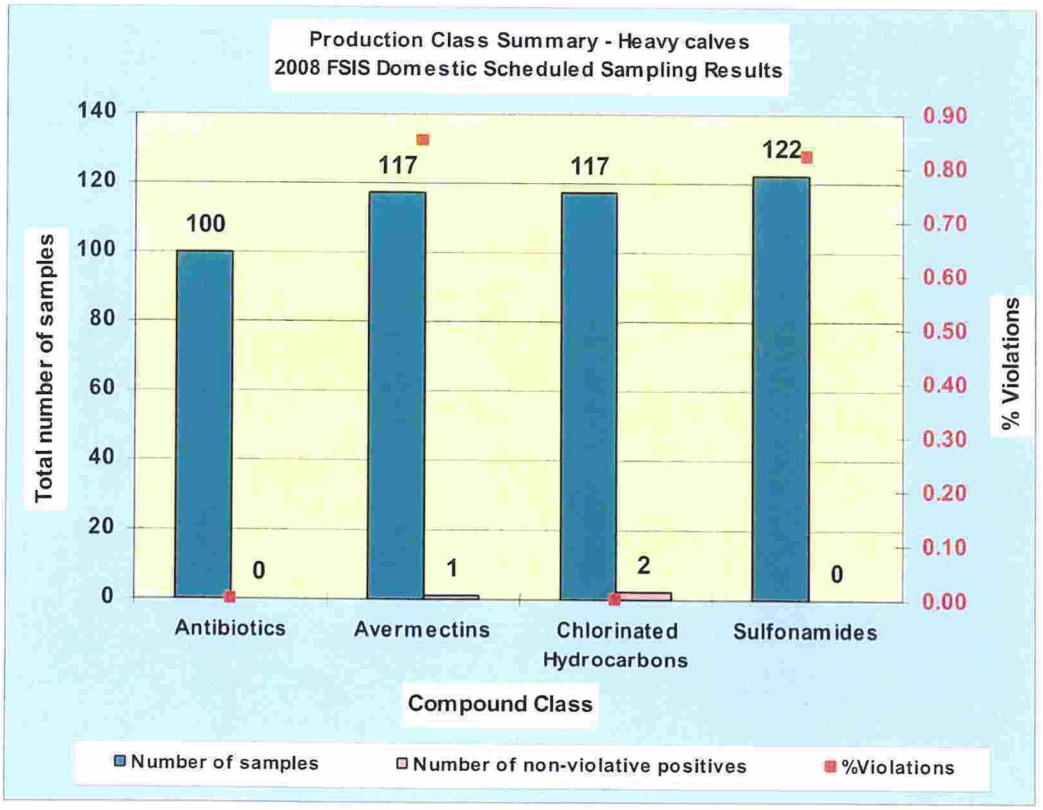


Table 30b
Chemical Residue Levels -Heavy calves
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples				
					NONE	0.11-0.20	0.21-0.30	0.51-1.00	> 5.00
Antibiotics	ppm	Kidney	100	0	100	-	-	-	-
Avermectins	ppb	Liver	117	1	115	-	-	-	2
Chlorinated Hydrocarbons	ppm	Fat	117	0	115	1	1	-	-
Sulfonamides	ppm	Liver	122	1	121	-	-	1	-

Violation Report- Heavy calves
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Heavy calves	Avermectins	Doramectin	Liver	164.9	ppb
Heavy calves	Sulfonamides	Sulfamethazine	Liver	0.75	ppm

Heifers

FSIS analyzed 1466 Heifers samples. One residue violation was detected: "Sulfamethazine". Table 31a *Heifers,* summarizes the results of the testing by compound class.

Table 31a
Residue Data Summary- Heifers
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	300	2	0	0.00
Chloramphenicol	ppb	Muscle	298	0	0	0.00
Chlorinated Hydrocarbons	ppm	Fat	277	4	0	0.00
MGA	ppb	Fat	285	13	0	0.00
Sulfonamides	ppm	Liver	306	0	1	0.33
TOTAL			**1,466**	**19**	**1**	**0.07**

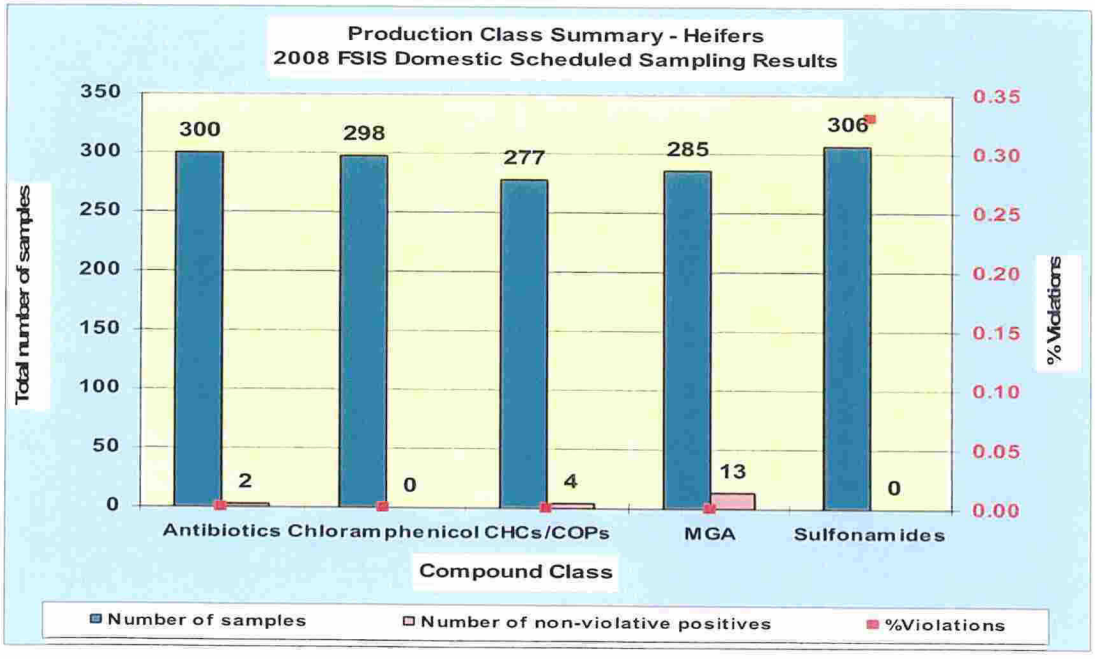


Table 31b
Chemical Residue Levels -Heifers
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples							
					NONE	0.01-0.10	0.21-0.30	0.31-0.50	0.51-1.00	1.01-9.90	10.00 15.00	Non-Quanti * Non-Vio**
Antibiotics	ppm	Kidney	300	0	298	-	-	-	1	-	-	1
Chloramphenicol	ppb	Muscle	298	0	298	-	-	-	-	-	-	-
Chlorinated Hydrocarbons	ppm	Fat	277	0	273	1	1	-	1	1	-	-
MGA	ppb	Fat	285	0	272	-	-	-	-	-	13	-
Sulfonamides	ppm	Liver	306	1	305	-	-	1	-	-	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Violation Report- Heifers
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Heifers	Sulfonamides	Sulfamethazine	Liver	0.31	ppm

Lambs

FSIS analyzed 814 samples from Lambs. No residue violations were detected. Table 32a *Lambs,* summarizes the results of the testing by compound class.

Table 32a
Residue Data Summary- Lambs
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	251	6	0	0.00
Avermectins	ppb	Liver	287	1	0	0.00
Chlorinated Hydrocarbons	ppm	Fat	276	2	0	0.00
TOTAL			**814**	**9**	**0**	**0.00**

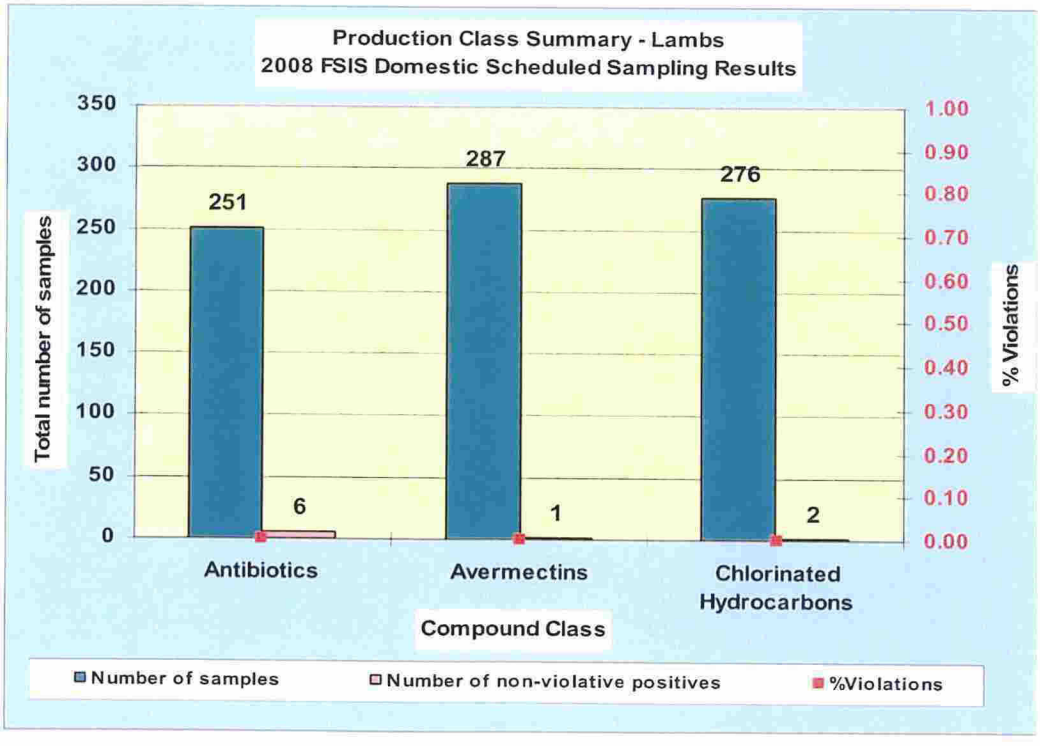


Table 32b
Chemical Residue Levels -Lambs
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples					
					NONE	0.11-0.20	0.21 - 0.30	0.51-1.00	> 5.00	Non-Quanti * Non-Vio **
Antibiotics	ppm	Kidney	251	0	245	-	1	1	-	4
Avermectins	ppb	Liver	287	0	286	-	-	-	1	-
Chlorinated Hydrocarbons	ppm	Fat	276	0	274	2	-	-	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Market hogs

FSIS analyzed 1,464 Market hogs samples. Three (3) residue violations were detected. The residue violations consisted of one (1) Carbadox, and two (2) Sulfamethazine. Table 33a *Market hogs,* summarizes the results of the testing by compound class.

Table 33a
Residue Data Summary– Market hogs
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	323	31	0	0.00
Carbadox	ppb	Liver	305	0	1	0.33
Furaltadone	ppb	Liver	303	0	0	0.00
Sulfonamides	ppm	Liver	223	0	2	0.90
beta Agonists	ppb	Liver	310	5	0	0.00
TOTAL			**1,464**	**36**	**3**	**0.20**

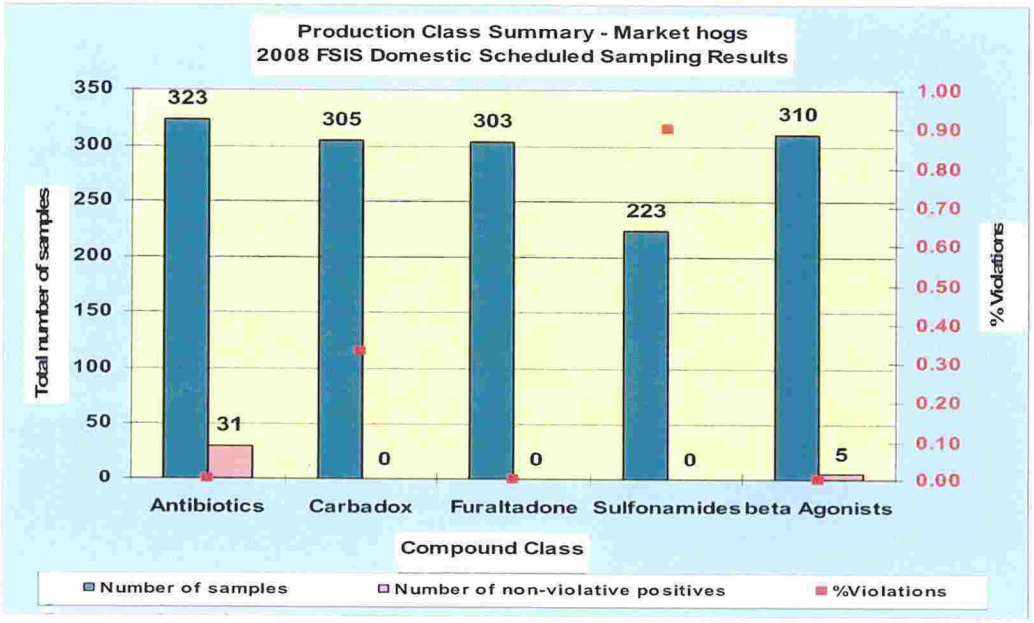


Table 33b
Chemical Residue Levels -Market hogs
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples				
					NONE	0.21 - 0.30	0.31 - 0.50	> 5.00	Non-Quanti* Non-Vio **
Antibiotics	ppm	Kidney	323	0	292	-	-	-	31
Carbadox	ppb	Liver	305	1	304	-	-	1	-
Furaltadone	ppb	Liver	303	0	303	-	-	-	-
Sulfonamides	ppm	Liver	223	2	221	1	1	-	-
beta Agonists	ppb	Liver	310	0	305	-	-	5	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Violation Report- Market hogs
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Market hogs	Carbadox	Carbadox	Liver	47	ppb
Market hogs	Sulfonamides	Sulfamethazine	Liver	0.42	ppm
Market hogs	Sulfonamides	Sulfamethazine	Liver	0.24	ppm

Mature chickens

FSIS analyzed 932 samples from Mature chickens. No residue violations were detected. Table 34a *Mature chickens,* summarizes the results of the testing by compound class.

Table 34a
Residue Data Summary– Mature chickens
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Chloramphenicol	ppb	Muscle	332	0	0	0.00
Florfenicol	ppm	Liver	266	0	0	0.00
Sulfonamides	ppm	Liver	334	0	0	0.00
TOTAL			**932**	**0**	**0**	**0.00**

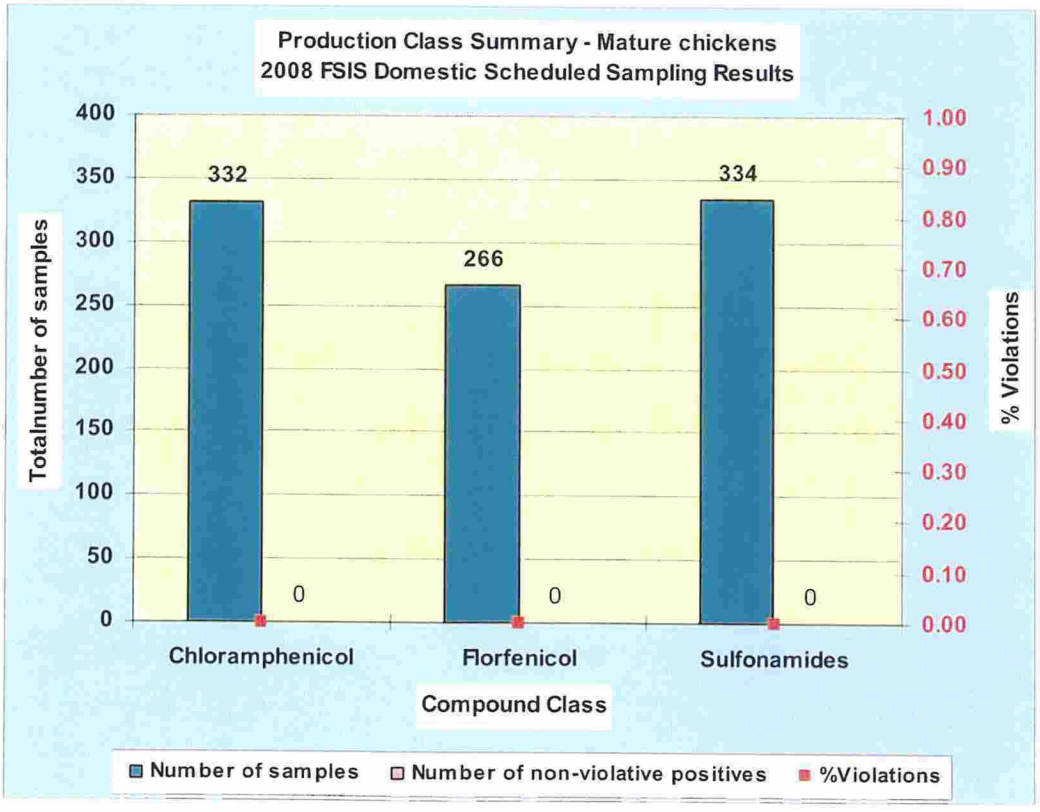


Table 34b
Chemical Residue Levels -Mature chickens
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples
					NONE
Chloramphenicol	ppb	Muscle	332	0	332
Florfenicol	ppm	Liver	266	0	266
Sulfonamides	ppm	Liver	334	0	334

Mature sheep

FSIS analyzed 472 Mature sheep samples. No residue violations were detected. Table 35a *Mature sheep,* summarizes the results of the testing by compound class.

Table 35a
Residue Data Summary– Mature sheep
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	62	0	0	0.00
Avermectins	ppb	Liver	213	0	0	0.00
Chlorinated Hydrocarbons	ppm	Fat	197	4	0	0.00
TOTAL			**472**	**4**	**0**	**0.00**

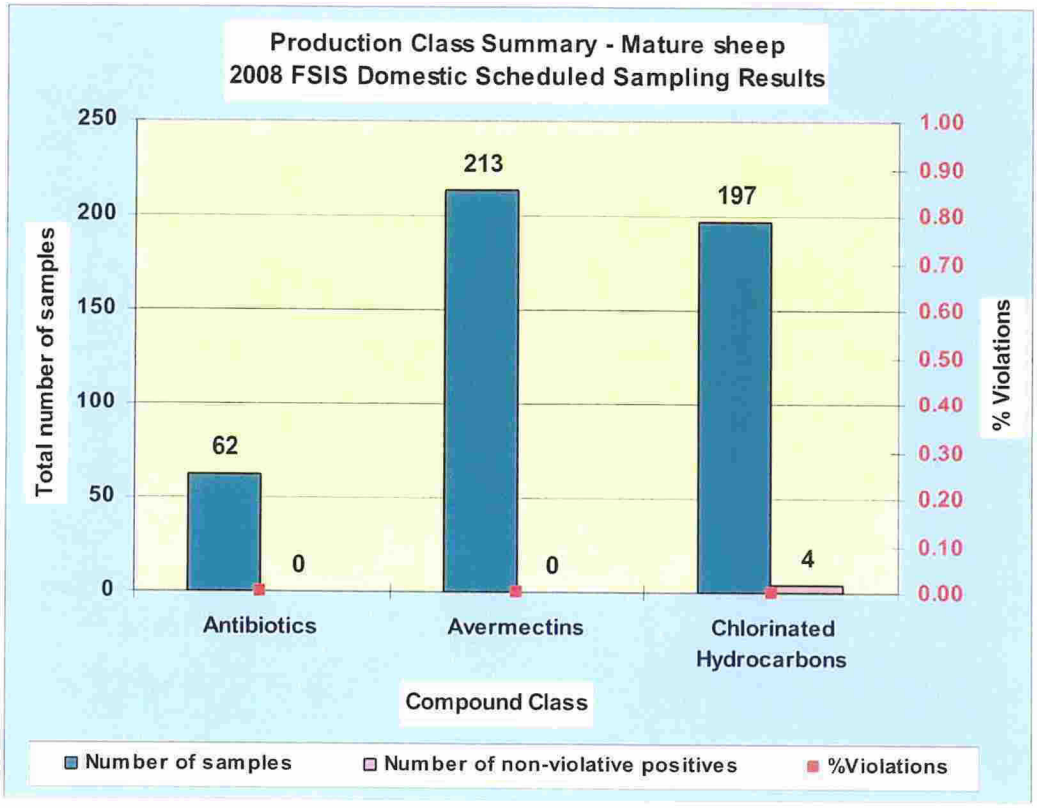


Table 35b
Chemical Residue Levels -Mature sheep
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples			
					NONE	0.11-0.20	0.21-0.30	0.31-0.50
Antibiotics	ppm	Kidney	62	0	62	-	-	-
Avermectins	ppb	Liver	213	0	213	-	-	-
Chlorinated Hydrocarbons	ppm	Fat	197	0	193	2	1	1

Mature turkeys

FSIS analyzed 658 samples from Mature turkeys. No residue violations were detected. Table 36a *Mature turkeys,* summarizes the results of the testing by compound class

Table 36a
Residue Data Summary– Mature turkeys
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Arsenic	ppm	Liver	328	1	0	0.00
Chloramphenicol	ppb	Muscle	330	0	0	0.00
TOTAL			**658**	**1**	**0**	**0.00**

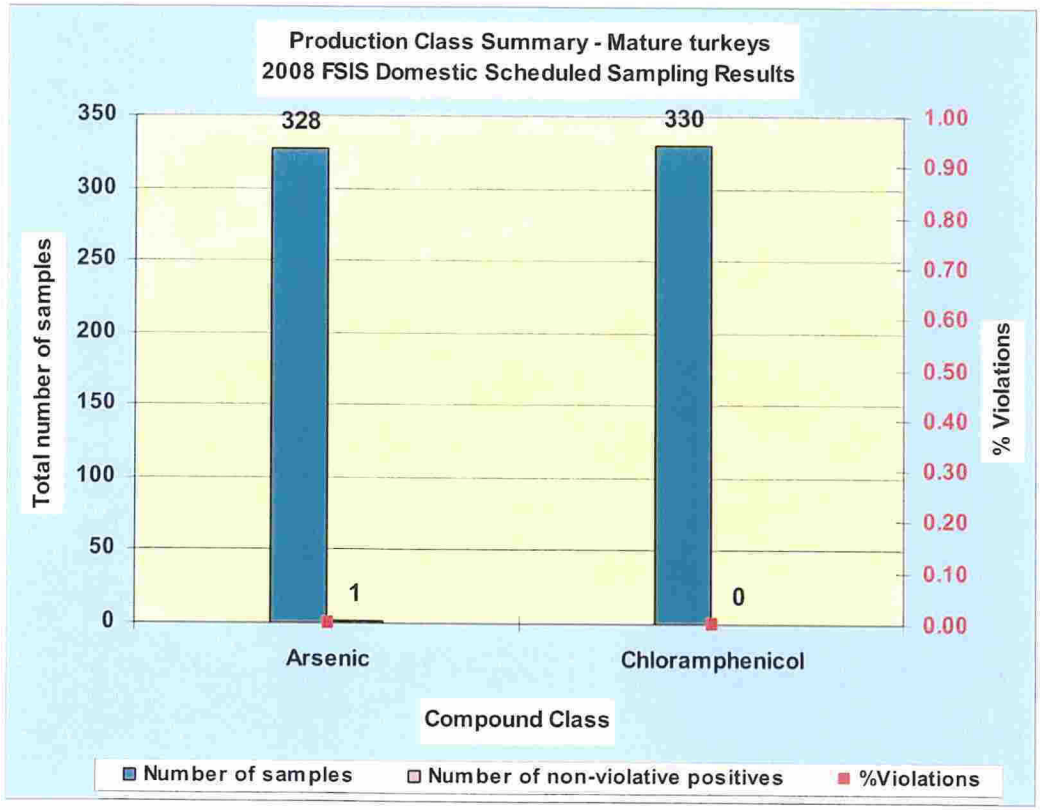


Table 36b
Chemical Residue Levels -Mature turkeys
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples	
					NONE	0.21-0.30
Arsenic	ppm	Liver	328	0	327	1
Chloramphenicol	ppb	Muscle	330	0	330	-

Non-formula fed veal

FSIS analyzed 673 Non-formula fed veal samples. One residue violation was detected: " Sulfamethazine". Table 37a *Non-formula fed veal* summarizes the results of the testing by compound class.

Table 37a
Residue Data Summary– Non-formula fed veal
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	102	6	0	0.00
Avermectins	ppb	Liver	99	2	0	0.00
Florfenicol	ppm	Liver	63	0	0	0.00
Sulfonamides	ppm	Liver	104	0	1	0.96
Trenbalone	ppm	Liver	97	0	0	0.00
Zeranol	ppb	Liver	97	0	0	0.00
beta Agonists	ppb	Liver	111	0	0	0.00
TOTAL			**673**	**8**	**1**	**0.15**

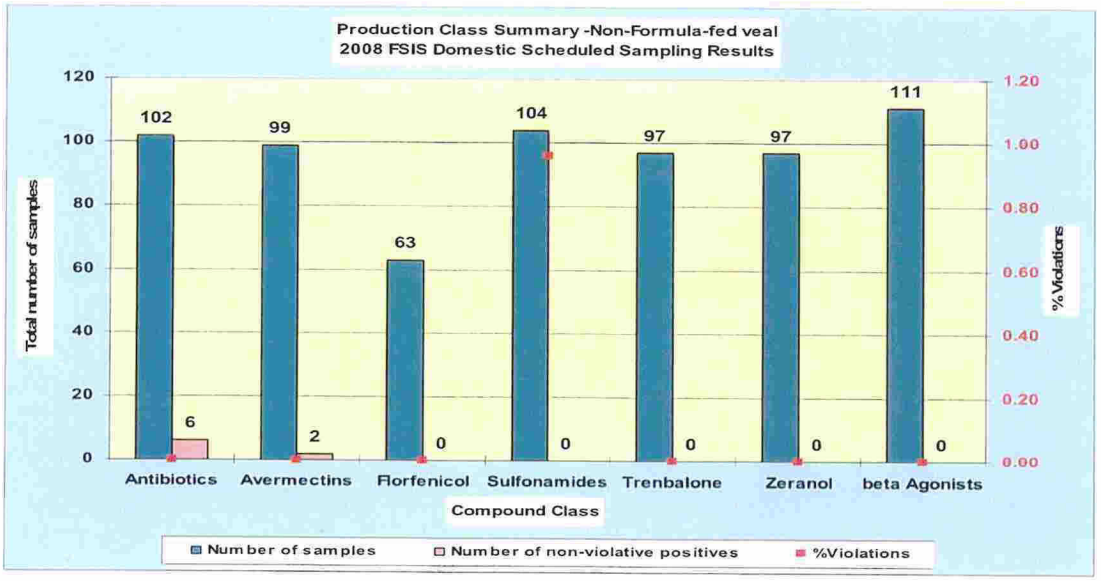


Table 37b
Chemical residue levels -Non-formula fed veal
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples						
					NONE	0.01-0.10	0.11-0.20	0.51-1.00	> 5.00	Non-Quanti * Non-Vio**	Non-Quanti * Vio***
Antibiotics	ppm	Kidney	102	0	93	1	-	1	-	6	1
Avermectins	ppb	Liver	99	0	97	-	-	-	2	-	-
Florfenicol	ppm	Liver	63	0	63	-	-	-	-	-	-
Sulfonamides	ppm	Liver	104	1	103	-	1	-	-	-	-
Trenbalone	ppm	Liver	97	0	97	-	-	-	-	-	-
Zeranol	ppb	Liver	97	0	97	-	-	-	-	-	-
beta Agonists	ppb	Liver	111	0	111	-	-	-	-	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.
*** " Vio" means violative.

Violation Report- Non-formula fed veal
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Non-formula fed veal	Sulfonamides	Sulfamethazine	Liver	0.11	ppm

Rabbits

FSIS analyzed 115 samples from Rabbits. No residue violations were detected. Table 38a *Rabbits,* summarizes the results of the testing by compound class.

Table 38a
Residue Data Summary- Rabbits
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	57	36	0	0.00
Avermectins	ppb	Liver	58	0	0	0.00
TOTAL			**115**	**36**	**0**	**0.00**

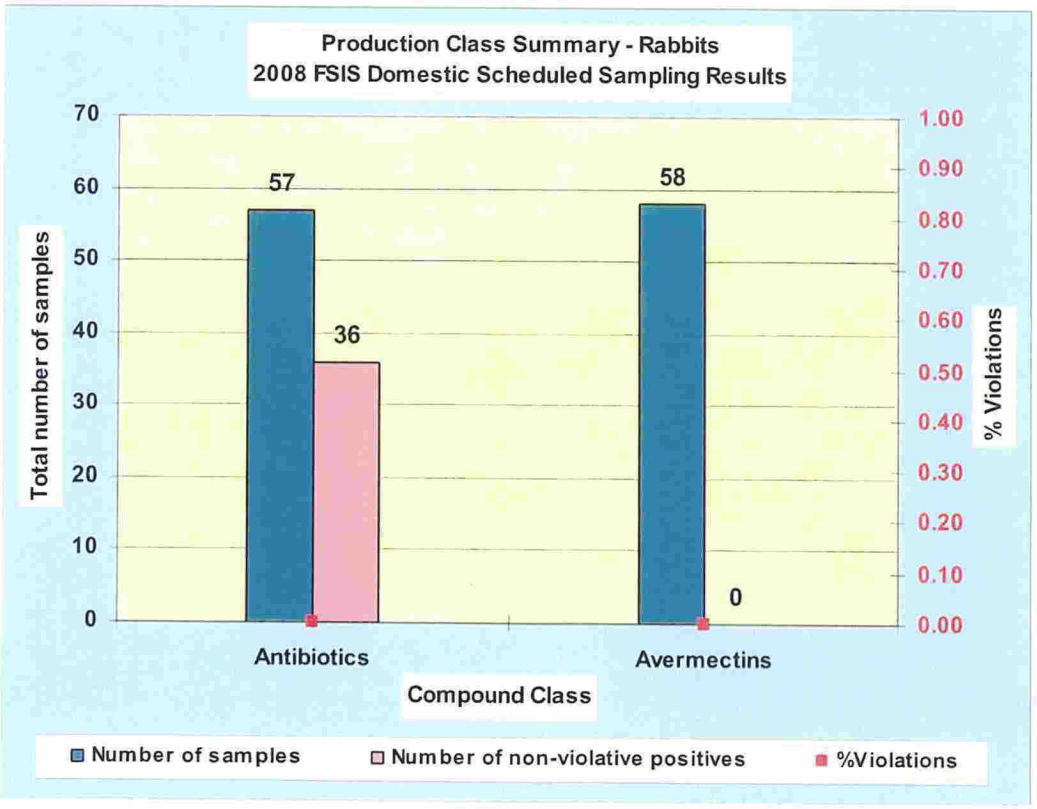


Table 38b
Chemical Residue Levels -Rabbits
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples	
					NONE	Non-Quanti * Non-Vio **
Antibiotics	ppm	Kidney	57	0	21	36
Avermectins	ppb	Liver	58	0	58	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Roaster pigs

FSIS analyzed 1,076 Roaster pigs samples. Three (3) residue violations (all Carbadox) were detected. Table 39a *Roaster pigs,* summarizes the results of the testing by compound class.

Table 39a
Residue Data Summary– Roaster pigs
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	289	87	0	0.00
Avermectins	ppb	Liver	290	0	0	0.00
Carbadox	ppb	Liver	267	3	3	1.12
Sulfonamides	ppm	Liver	230	1	0	0.00
TOTAL			**1,076**	**91**	**3**	**0.28**

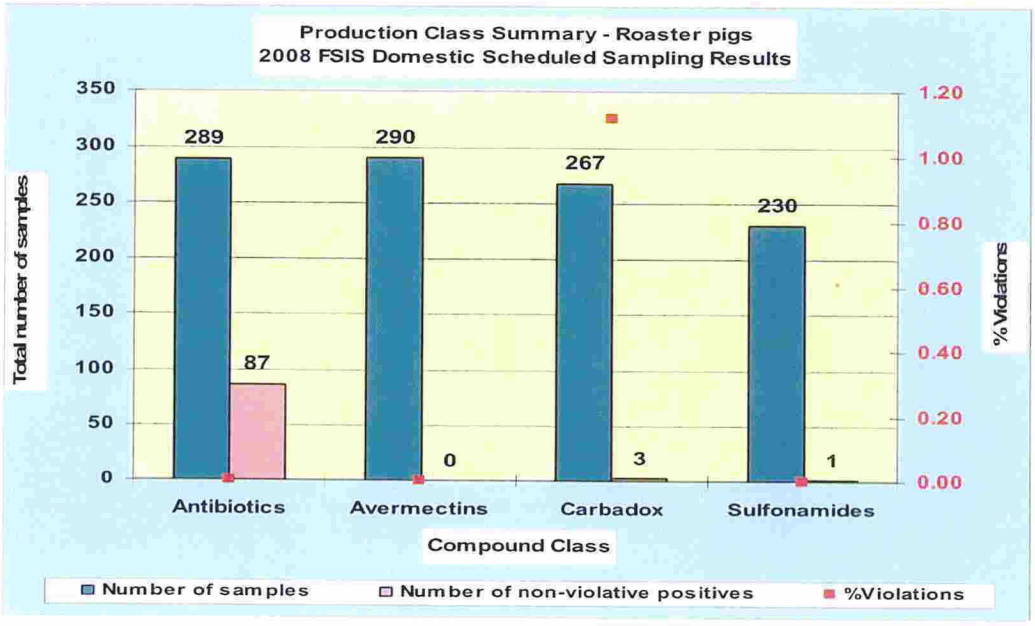


Table 39b
Chemical Residue Levels -Roaster pigs
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples								
					NONE	0.01 - 0.10	0.11 - 0.20	0.21 - 0.30	0.31 - 0.50	0.51 - 1.00	1.01 - 2.51	> 5.00	Non-Quanti * Non-Vio**
Antibiotics	ppm	Kidney	289	0	202	-	2	3	3	1	2	1	75
Avermectins	ppb	Liver	290	0	290	-	-	-	-	-	-	-	-
Carbadox	ppb	Liver	267	3	261	-	-	-	-	-	-	6	-
Sulfonamides	ppm	Liver	230	0	229	1	-	-	-	-	-	-	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Violation Report- Roaster pigs
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Roaster pigs	Carbadox	Carbadox	Liver	69	ppb
Roaster pigs	Carbadox	Carbadox	Liver	38	ppb
Roaster pigs	Carbadox	Carbadox	Liver	110	ppb

Sows

FSIS analyzed 1,371 samples from Sows. Two (2) violations (both Sulfamethazine) were detected. Table 40a *Sows* summarizes the results of the testing by compound class.

Table 40a
Residue Data Summary– Sows
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	223	13	0	0.00
Avermectins	ppb	Liver	311	0	0	0.00
Chlorinated Hydrocarbons	ppm	Fat	228	2	0	0.00
Furaltadone	ppb	Liver	295	0	0	0.00
Sulfonamides	ppm	Liver	314	0	2	0.64
TOTAL			**1,371**	**15**	**2**	**0.15**

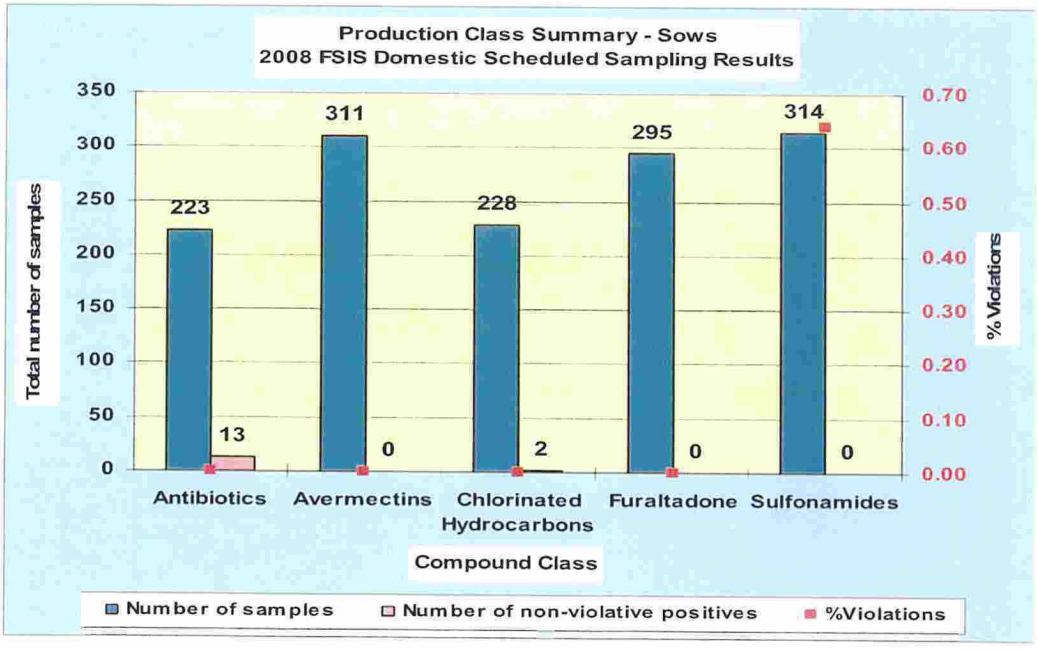


Table 40b
Chemical Residue Levels -Sows
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples				
					NONE	0.21-0.30	0.31-0.50	1.01-2.51	Non-Quanti * Non-Vio**
Antibiotics	ppm	Kidney	223	0	210	-	1	-	12
Avermectins	ppb	Liver	311	0	311	-	-	-	-
Chlorinated Hydrocarbons	ppm	Fat	228	0	226	1	-	1	-
Furaltadone	ppb	Liver	295	0	295	-	-	-	-
Sulfonamides	ppm	Liver	314	2	312	-	1	1	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Violation Report- Sows
2008 FSIS Domestic Scheduled Sampling Results

Production class	Compound class	Residue	Tissue	Result	Units
Sows	Sulfonamides	Sulfamethazine	Liver	1.2	ppm
Sows	Sulfonamides	Sulfamethazine	Liver	0.31	ppm

Steers

FSIS analyzed 887 Steers samples. No residue violations were detected. Table 41a *Steers,* summarizes the results of the testing by compound class.

Table 41a
Residue Data Summary– Steers
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	318	0	0	0.00
Chloramphenicol	ppb	Muscle	317	0	0	0.00
Sulfonamides	ppm	Liver	252	0	0	0.00
TOTAL			**887**	**0**	**0**	**0.00**

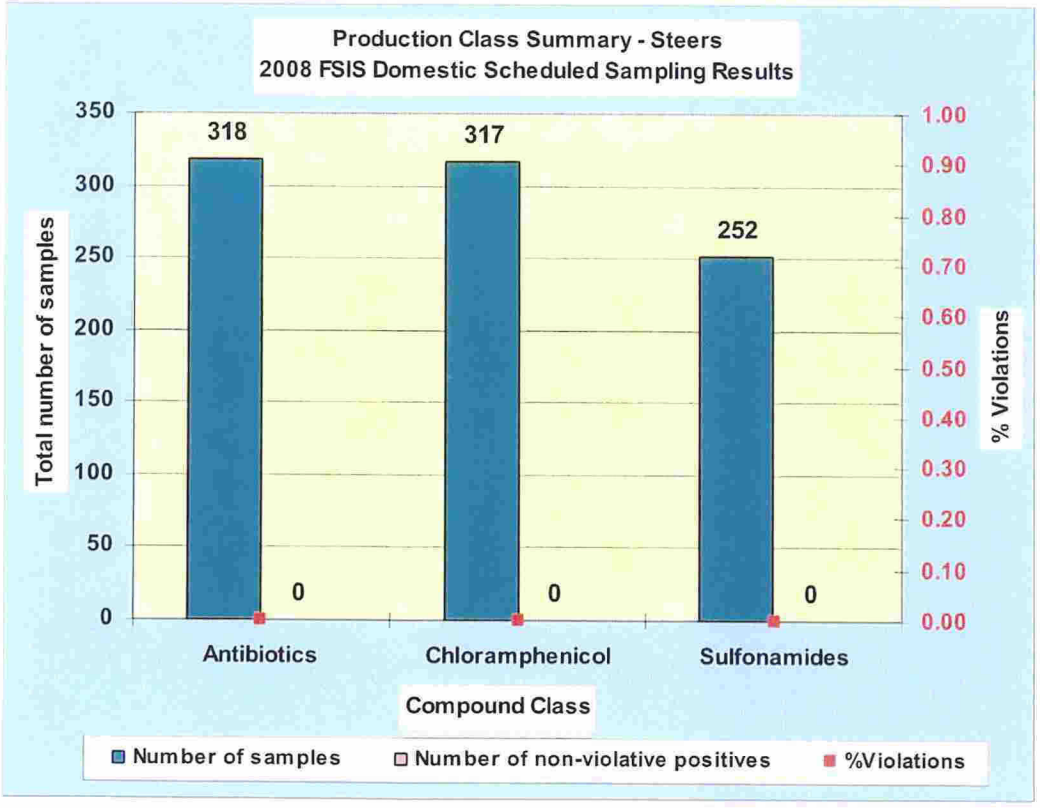


Table 41b
Chemical Residue Levels -Steers
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples
					NONE
Antibiotics	ppm	Kidney	318	0	318
Chloramphenicol	ppb	Muscle	317	0	317
Sulfonamides	ppm	Liver	252	0	252

Young chickens

FSIS analyzed 883 samples from Young chickens. No residue violations were detected. Table 42a Young *chickens,* summarizes the results of the testing by compound class.

Table 42a
Residue Data Summary– Young chickens
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	296	4	0	0.00
Nitroimidazoles	ppm	Muscle	293	0	0	0.00
Sulfonamides	ppm	Liver	294	0	0	0.00
TOTAL			**883**	**4**	**0**	**0.00**

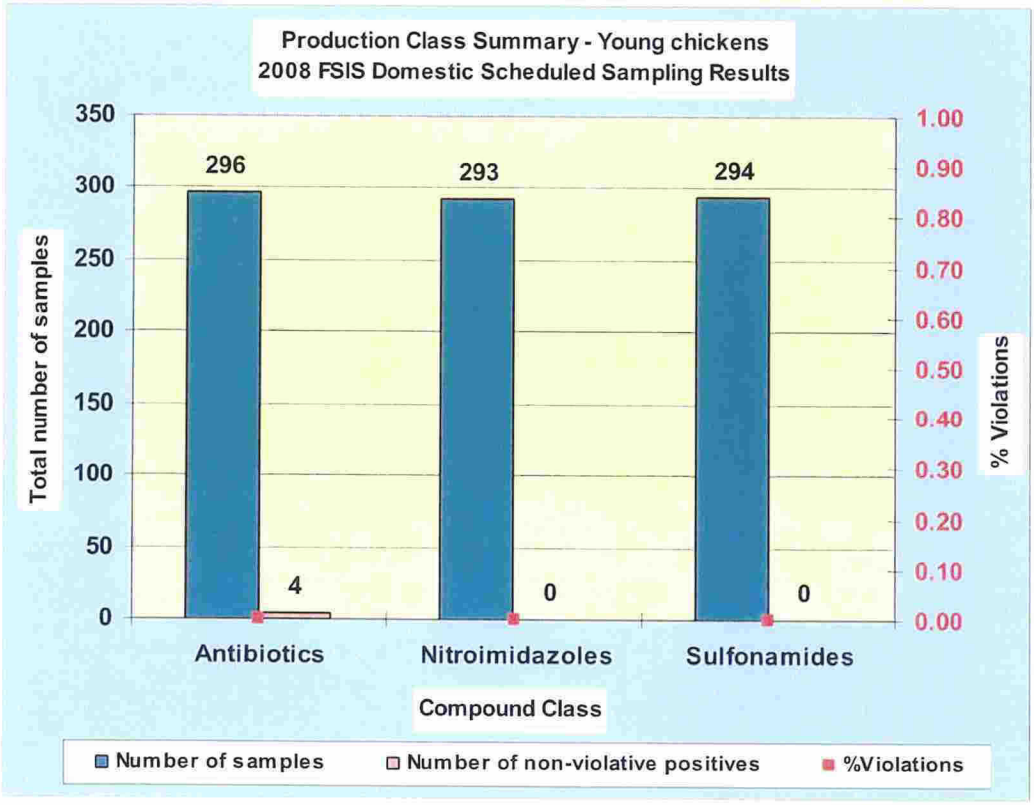


Table 42b
Chemical Residue Levels -Young chickens
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples	
					NONE	Non-Quanti * Non-Vio **
Antibiotics	ppm	Kidney	296	0	292	4
Nitroimidazoles	ppm	Muscle	293	0	293	-
Sulfonamides	ppm	Liver	294	0	294	-

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

Young turkeys

FSIS analyzed 294 Young turkeys samples. No residue violations were detected. Table 43a *Young turkeys* summarizes the results of the testing by compound class

Table 43a
Residue Data Summary– Young turkeys
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Number of Samples	Number of non-violative positives	Number of violations	Percent violations
Antibiotics	ppm	Kidney	294	15	0	0.00
TOTAL			**294**	**15**	**0**	**0.00**

Table 43b
Chemical Residue Levels -Young turkeys
2008 FSIS Domestic Scheduled Sampling Results

Compound class	Units	Tissue	Total number of samples	Violations	Residue levels found in samples			
					NONE	0.31-0.50	0.51-1.00	Non-Quanti * Non-Vio **
Antibiotics	ppm	Kidney	294	0	279	1	2	12

* "Non-Quanti" means non-quantitative.
** "Non-Vio" means non-violative.

SCHEDULED SAMPLING EXPLORATORY ASSESSMENTS

ENVIRONMENTAL CONTAMINANTS (Cadmium and Lead)

FSIS conducted an exploratory assessment to survey the prevalence of cadmium and lead in beef cows. Muscle and kidney samples with cadmium levels below the Minimum Proficiency Level, 10 ppb for cadmium and 25 ppb for lead, are labeled ND (non detect) in tables 44 and 45.

Table 44
Cadmium Levels in Muscles and Kidneys from Beef Cows
2008 FSIS Exploratory Assessments Results

Cadmium (ppb)		
Samples	**Muscle Levels**	**Kidney Levels**
1	ND	1697.61
2	ND	376.65
3	ND	369.71
4	ND	788.12
5	ND	3092.91
6	ND	541.13
7	ND	610.7
8	ND	558.46
9	ND	799.58
10	ND	505.83
11	ND	503.78
12	ND	166.49
13	ND	102.13
14	ND	104.19
15	ND	1385.71
16	ND	1193.26
17	ND	2368.76
18	ND	672.73
19	ND	1294.77
20	ND	266.09
21	ND	561.3
22	ND	410.09
23	ND	613.38
24	42.83	123.39
25	19.53	308.1
26	80.24	488.74
27	76.32	90.92
28	ND	1065.98
29	ND	5162.1
30	ND	315.26
31	ND	568.72

Cadmium (ppb)		
Samples	**Muscle Levels**	**Kidney Levels**
32	ND	778.54
33	ND	2276.41
34	ND	374.87
35	ND	457.95
36	ND	821.08
37	ND	836.2
38	ND	662.38
39	ND	591.55
40	ND	596.9
41	ND	181.95
42	ND	476.13
43	ND	541.26
44	ND	26.96
45	ND	6079.59
46	ND	82.57
47	ND	1888.44
48	ND	443.68
49	ND	656.38
50	ND	144.75
51	ND	216.06
52	ND	5181.76
53	ND	187.15
54	ND	264.26
55	ND	165.05
56	ND	369.73
57	ND	97.25
58	ND	3791.08
59	ND	825.31
60	ND	106.09
61	ND	1226.05
62	ND	530.45

Table 44-*continued*
Cadmium Levels in Muscles and Kidneys from Beef Cows
2008 FSIS Exploratory Assessments Results

Cadmium (ppb)		
Samples	**Muscle Levels**	**Kidney Levels**
63	ND	489.13
64	ND	149.17
65	ND	148.23
66	ND	234.7
67	ND	568.47
68	ND	77.69
69	ND	111.34
70	ND	286.86
71	ND	1754.7
72	12.06	731.13
73	ND	417.12
74	ND	503.09
75	ND	608.39
76	ND	53.01
77	ND	83.76
78	ND	257.26
79	ND	471.08
80	ND	186.19
81	ND	408.33
82	ND	432.67
83	ND	105.75
84	ND	582.18
85	ND	483.2
86	ND	143.57
87	ND	228.81
88	ND	315.21
89	ND	802.12
90	ND	363.61
91	ND	148.86
92	ND	116.79
93	ND	619.06
94	ND	510.93
95	ND	108.07
96	ND	1650.96
97	ND	155.08
98	ND	625.63
99	ND	322.44
100	ND	897.5
101	ND	1358.7
102	ND	303.12
103	ND	1307.6
104	ND	528.4
105	ND	1618.49
106	ND	528.11
107	ND	218.5
108	ND	210.77
109	ND	289.86

Cadmium (ppb)		
Samples	**Muscle Levels**	**Kidney Levels**
110	ND	2637.36
111	ND	1737.47
112	ND	249.19
113	ND	593.61
114	276.96	615.03
115	ND	1233.84
116	ND	570.62
117	ND	745.05
118	ND	467.38
119	ND	542.36
120	ND	1186.44
121	ND	434.9
122	ND	663.31
123	ND	258.47
124	ND	3276.57
125	ND	47.71
126	ND	809.51
127	ND	383.47
128	ND	211.34
129	ND	119.44
130	ND	634.14
131	ND	1071.24
132	ND	273.11
133	ND	1033.87
134	ND	315.31
135	ND	167.34
136	ND	671.36
137	ND	706.52
138	ND	1060.4
139	ND	96.58
140	ND	5121.7
141	ND	428.01
142	ND	2081.15
143	ND	1920.13
144	ND	860.14
145	ND	450.62
146	ND	165.65
147	ND	477.36
148	ND	90.23
149	ND	692.86
150	ND	108.86
151	ND	264.01
152	ND	169.88
153	ND	2874.71
154	ND	1714.72
155	ND	751.22
156	ND	492.25

Table 44-*continued*
Cadmium Levels in Muscles and Kidneys from Beef Cows
2008 FSIS Exploratory Assessments Results

Cadmium (ppb)		
Samples	**Muscle Levels**	**Kidney Levels**
157	ND	689.62
158	ND	1098.89
159	ND	776.22
160	ND	432.58
161	ND	97.37
162	ND	1861.6
163	ND	775.32
164	ND	175.14
165	ND	78.95
166	ND	767.5
167	ND	1474.08
168	ND	509.27
169	ND	549.88
170	ND	243.64
171	ND	432.45
172	ND	1173.07
173	ND	57.44
174	ND	485.51
175	ND	545.18
176	ND	696.6
177	ND	1441.81
178	ND	299.35
179	ND	1724.23
180	ND	593.61
181	ND	4038.1
182	ND	2729.7
183	ND	2013.04
184	ND	770.32
185	ND	88.16
186	ND	1370.07
187	ND	2999.76
188	ND	97.91
189	ND	910.15
190	ND	1324.94
191	ND	1358.42
192	ND	725.67
193	ND	480.7
194	ND	714.52
195	ND	337.88
196	ND	776.77
197	ND	1841.97
198	ND	279.82
199	ND	243.97
200	ND	1160.97
201	ND	654.76
202	ND	1758.86
203	ND	366.98

Cadmium (ppb)		
Samples	**Muscle Levels**	**Kidney Levels**
204	ND	403.29
205	ND	483
206	ND	1453.8
207	ND	984.78
208	ND	518.91
209	ND	112.03
210	ND	344.42
211	ND	567.21
212	ND	135.4
213	ND	214.92
214	ND	247.31
215	ND	533.41
216	ND	224.75
217	ND	311.5
218	ND	5343.16
219	ND	1317.91
220	ND	9054.39
221	ND	383.56
222	ND	706.31
223	ND	183.56
224	ND	706.58
225	13.26	926.96
226	ND	2263.19
227	ND	5472.62
228	ND	881.54
229	ND	602.08
230	ND	1219.29
231	ND	1819.69
232	ND	1191.58
233	ND	99.58
234	ND	1012.6
235	ND	4662.01
236	ND	1823.35
237	ND	279.83
238	ND	98.35
239	ND	434.28
240	ND	922.38
241	ND	3086.19
242	ND	308.8
243	ND	321.4
244	ND	3156.41
245	ND	360.61
246	ND	436.1
247	ND	223.19
248	ND	183.92
249	ND	770.12
250	ND	274.18

Table 44-*continued*
Cadmium Levels in Muscles and Kidneys from Beef Cows
2008 FSIS Exploratory Assessments Results

Cadmium (ppb)		
Samples	**Muscle Levels**	**Kidney Levels**
251	ND	624.65
252	ND	204.54
253	ND	1671.62
254	ND	123.28
255	ND	160.4
256	ND	1538.81
257	ND	2945.15
258	ND	74.61
259	ND	2029.35
260	ND	107.09
261	ND	267.14
262	ND	202.7
263	ND	324.69
264	ND	482.27
265	ND	75.58
266	ND	474.48
267	ND	332.62
268	ND	298.15
269	ND	1830.98
270	ND	206.99
271	ND	6164.94
272	ND	1158.85
273	ND	187.12
274	ND	275.71
275	ND	279.74
276	ND	1825.8
277	ND	378.77
278	ND	3825.69
279	ND	1584.28
280	ND	3408.76
281	ND	1008.43
282	ND	384.84
283	66.42	372.88
284	ND	479.89
285	ND	198.21

Cadmium (ppb)		
Samples	**Muscle Levels**	**Kidney Levels**
286	ND	210.88
287	ND	3748.08
288	ND	1039.4
289	ND	95.32
290	ND	ND
291	ND	196.66
292	ND	2765.23
293	ND	2820.28
294	ND	76.36
295	ND	344.64
296	ND	521.76
297	ND	498.31
298	ND	198.18
299	ND	1591.68
300	ND	666.66
301	ND	433.93
302	ND	892.48
303	ND	64.93
304	ND	250.28
305	ND	3311.99
306	ND	2139.07
307	ND	51.64
308	ND	1290.5
309	ND	237.54
310	ND	1206.5
311	ND	533.69
312	ND	186.61
313	ND	2534.89
314	ND	678.47
315	ND	547.23
316	ND	1892.45
317	ND	79.1
318	ND	376.14
319	ND	700.42

Table 45
Lead Levels in Muscles and Kidneys from Beef Cows
2008 FSIS Exploratory Assessments Results

Lead (ppb)		
Sample	**Muscle Levels**	**Kidney Levels**
1	ND	ND
2	ND	ND
3	ND	ND
4	ND	31.06
5	ND	112.61
6	29.25	28.21
7	ND	28.79
8	ND	ND
9	ND	ND
10	ND	ND
11	ND	65.35
12	ND	30.61
13	28.1	ND
14	ND	38.75
15	ND	27.85
16	ND	618.86
17	ND	30.75
18	ND	ND
19	ND	25.19
20	ND	295.22
21	ND	27.28
22	ND	37.19
23	ND	29.01
24	90.64	32.86
25	38.87	ND
26	165.36	45.44
27	ND	ND
28	ND	ND
29	ND	361.86
30	ND	ND
31	ND	34.29
32	ND	33.36
33	ND	ND
34	ND	ND
35	ND	ND
36	ND	ND
37	ND	81.68
38	ND	ND
39	ND	ND
40	ND	60.58
41	ND	ND
42	ND	42.53
43	ND	27.76
44	ND	ND

Lead (ppb)		
Sample	**Muscle Levels**	**Kidney Levels**
45	ND	55.57
46	ND	ND
47	ND	49.97
48	ND	27.93
49	ND	ND
50	ND	ND
51	ND	ND
52	ND	165.85
53	ND	109.77
54	ND	ND
55	83.61	64.55
56	ND	72.73
57	ND	ND
58	ND	36.55
59	ND	ND
60	31.11	ND
61	45.78	50.81
62	87.93	ND
63	ND	ND
64	174.77	71.47
65	ND	105.45
66	ND	ND
67	ND	286.85
68	ND	ND
69	ND	38.84
70	ND	ND
71	ND	37.56
72	30.48	136.73
73	ND	83.22
74	ND	ND
75	37.84	35.58
76	ND	1237.2
77	27.44	36.26
78	ND	ND
79	ND	37.05
80	ND	ND
81	ND	63.61
82	ND	29.01
83	28.62	30.94
84	ND	ND
85	ND	32.83
86	ND	ND
87	ND	41.41
88	ND	ND

Table 45-*continued*
Lead Levels in Muscles and Kidneys from Beef Cows
2008 FSIS Exploratory Assessments Results

Lead (ppb)		
Sample	**Muscle Levels**	**Kidney Levels**
89	ND	46.83
90	ND	ND
91	ND	27.78
92	ND	66.96
93	ND	41.7
94	ND	ND
95	ND	55.14
96	ND	35.67
97	ND	ND
98	ND	ND
99	ND	39.09
100	ND	ND
101	ND	38.97
102	ND	ND
103	ND	ND
104	ND	ND
105	ND	ND
106	ND	59.84
107	ND	ND
108	ND	ND
109	ND	63.43
110	ND	46.14
111	ND	31.29
112	ND	59.89
113	ND	ND
114	ND	ND
115	ND	58.3
116	ND	ND
117	ND	ND
118	ND	26.45
119	ND	ND
120	ND	47.32
121	31.37	ND
122	ND	105.4
123	ND	30.33
124	ND	113.75
125	ND	31.76
126	ND	ND
127	ND	ND
128	ND	33.73
129	ND	ND
130	ND	30
131	ND	51.42
132	ND	ND
133	ND	ND
134	ND	49.76
135	ND	25.68
136	ND	27.79

Lead (ppb)		
Sample	**Muscle Levels**	**Kidney Levels**
137	ND	31.56
138	ND	ND
139	ND	67.1
140	ND	210.9
141	39.82	ND
142	58.88	ND
143	362.26	98.63
144	ND	63.39
145	ND	63.49
146	ND	49.53
147	ND	161.02
148	54.61	ND
149	ND	ND
150	ND	ND
151	ND	27.7
152	ND	27.39
153	ND	356.2
154	ND	41.62
155	83.67	55.76
156	ND	ND
157	47.18	103.59
158	ND	ND
159	ND	68.04
160	ND	30.16
161	ND	ND
162	ND	34.2
163	ND	32.29
164	ND	33.84
165	241.87	87.75
166	ND	ND
167	ND	54.74
168	ND	ND
169	1359.28	29.99
170	ND	140.65
171	ND	ND
172	ND	31.25
173	ND	ND
174	74.6	26.85
175	ND	ND
176	ND	52.67
177	ND	ND
178	ND	34.47
179	ND	ND
180	ND	ND
181	ND	35.71
182	ND	57.49
183	34.36	ND
184	ND	112.34

Table 45-*continued*
Lead Levels in Muscles and Kidneys from Beef Cows
2008 FSIS Exploratory Assessments Results

Lead (ppb)		
Sample	**Muscle Levels**	**Kidney Levels**
185	ND	32.05
186	ND	67.1
187	ND	105.83
188	ND	35.41
189	ND	ND
190	ND	ND
191	ND	ND
192	ND	32.69
193	114.82	116.08
194	ND	34.89
195	ND	27.35
196	ND	43.75
197	ND	ND
198	ND	30.87
199	ND	62.16
200	ND	54.54
201	ND	ND
202	ND	85.51
203	ND	26.8
204	ND	ND
205	ND	29.66
206	ND	ND
207	ND	66.51
208	ND	ND
209	ND	ND
210	ND	ND
211	56.55	60.97
212	ND	ND
213	ND	91.5
214	ND	ND
215	ND	ND
216	ND	34.85
217	ND	68.71
218	ND	65.65
219	ND	ND
220	ND	180.21
221	161.94	ND
222	ND	30.35
223	ND	ND
224	ND	101.26
225	ND	42.64
226	ND	ND
227	ND	77.12
228	ND	38.12
229	94.42	67
230	ND	31.5
231	ND	ND
232	ND	ND

Lead (ppb)		
Sample	**Muscle Levels**	**Kidney Levels**
233	ND	40.06
234	ND	350.19
235	ND	ND
236	ND	96.89
237	ND	ND
238	ND	36.22
239	ND	40.41
240	ND	45.32
241	ND	62.57
242	ND	98.63
243	ND	ND
244	ND	73.38
245	ND	69.4
246	ND	31.29
247	ND	47.09
248	ND	26.77
249	ND	26.26
250	ND	26.62
251	ND	ND
252	ND	ND
253	ND	88.21
254	ND	ND
255	ND	ND
256	ND	34.8
257	ND	ND
258	39.01	26.57
259	ND	59.11
260	ND	32.68
261	ND	49.15
262	ND	27
263	ND	ND
264	ND	52.05
265	ND	32.38
266	ND	140.15
267	ND	27.25
268	ND	ND
269	ND	62.79
270	ND	35.95
271	ND	30.8
272	ND	ND
273	ND	ND
274	ND	26.53
275	ND	ND
276	ND	32.05
277	ND	ND
278	ND	66.15
279	ND	50.51
280	ND	168.68

Table 45-*continued*
Lead Levels in Muscles and Kidneys from Beef Cows
2008 FSIS Exploratory Assessments Results

Lead (ppb)		
Sample	**Muscle Levels**	**Kidney Levels**
281	ND	42.24
282	ND	32.2
283	ND	279.93
284	ND	37.49
285	ND	ND
286	ND	40.39
287	ND	63.72
288	ND	ND
289	ND	41.31
290	ND	ND
291	ND	34.39
292	ND	ND
293	ND	62.27
294	ND	1217.3
295	ND	43.72
296	ND	28
297	ND	36.95
298	ND	ND
299	ND	ND
300	64.23	26.05
301	ND	ND

Lead (ppb)		
Sample	**Muscle Levels**	**Kidney Levels**
302	ND	46.81
303	ND	ND
304	ND	ND
305	ND	60.7
306	ND	ND
307	ND	25.28
308	ND	43.97
309	ND	29.51
310	ND	35.44
311	ND	ND
312	ND	ND
313	ND	25.79
314	ND	29.69
315	ND	83.41
316	ND	56.57
317	39.1	59.66
318	ND	29.27
319	161.47	37.99

Table 46
Number of Positive and Nondetect (ND) Beef Cow Samples Analyzed for Cadmium and Lead
2008 FSIS Exploratory Assessments Results

Table 46, *Number of Positive and Nondetect (ND) Beef Cow Samples Analyzed for Cadmium and Lead*, presents the number of positives and ND samples by metal and tissue analyzed.

Environmental Contaminants		Samples		
		ND	Positive*	Total
Metal		1	318	319
Cadmium	Kidney			
	Muscle	311	8	319
	Total for Cadmium	312	326	638
Lead	Kidney	124	195	319
	Muscle	286	33	319
	Total for Lead	410	228	638

Note: Positive samples have detectable lead or cadmium levels above the Minimum Proficiency Levels, 10 ppb for cadmium, 25 ppb for lead.

ENVIRONMENTAL CONTAMINANTS - *continued*

Table 47, *Statistical Analysis of the Cadmium and Lead Levels in Kidneys and Muscles from Beef Cows*, presents the statistical analysis of the cadmium and lead levels detected in muscles and kidneys from beef cows. In this table, positive and nondetect samples were used to calculate the values presented in red font. For these calculations, a default level of zero was used for nondetects. All other values presented in the table (black font) are applicable to positive samples only.

Table 47
Statistical Analysis of the Cadmium and Lead Levels in Kidneys and Muscles from Beef Cows
2008 FSIS Exploratory Assessments Results

Metal	Tissue	Number of Samples	Number of Positive	Percent of Positive Samples	Levels Range (ppb)	Median Levels (ppb)	Mean Levels (ppb)	Standard Deviation	95th percentile
Cd	Kidney	319	318	99.68%	26.96 -9,054.39 0.00 - 9,054.39	520.34 518.91	914.31 911.44	1,162.21 1,161.51	3,174.43 3,168.42
Cd	Muscle	319	8	2.5%	12.06 -276.96 0.00 – 276.96	54.63 0.00	73.45 1.84	86.81 17.26	208.11 0
Pb	Kidney	319	195	61.1%	25.19 – 1,237.20 0.00 – 1,237.20	42.53 30.16	76.69 46.88	136.31 112.86	189.41 137.07
Pb	Muscle	319	33	10.3%	27.44 – 1,359.28 0.00 – 1,359.28	56.55 0.00	121.79 12.59	230.64 82.82	284.01 56.67

INSPECTOR GENERATED SAMPLING

• SUSPECT ANIMALS

Inspector generated sampling of suspect animals is conducted by in-plant Public Health Veterinarians (PHVs) when it is suspected that an animal may have violative levels of chemical residues. Samples collected could be screened in the plant using Fast Antimicrobial Screen Test (FAST). If the PHV does not have FAST capability, the sample can be sent directly to the FSIS laboratory for testing.

Inspector generated sampling results are presented in two tables for each specific analysis unless there is only one compound tested. The first table (a) states the total number of animals analyzed, the number of violations, and the percent violations for each production class. Since analyses for multiple compounds can be performed on the same sample, one sample (one animal) could have more than one violation. The second table (b) identifies the results for specific compounds that were detected within the compound class.

SAMPLES SCREENED IN-PLANT AND CONFIRMED IN A FSIS LABORATORY

FAST ANTIMICROBIAL SCREEN TEST (FAST)

FSIS used FAST to screen 135,389 animals for antibiotic and sulfonamide residues. Samples found to be FAST positive for antibiotics or sulfonamides were further analyzed for flunixin, a non-steroidal anti-inflammatory compound. FSIS laboratories confirmed 1,642 violations in 1,182 animals.

There were one (1) Amikacin, eight (8) Ampicillin, 94 Desfuroylceftiofur (DCA or DCCD) , three (3) Dihydro Streptomycin , 117 Gentamycin Sulfate , 204 Neomycin ,76 Oxytetracycline , 424 Penicillin, 29 Tetracycline , 23 Tilmicosin, one (1) Tylosin, four (4) Sulfadiazine, 218 Sulfadimethoxine , one (1) Sulfadoxine , 79 Sulfamethazine , 28 Sulfamethoxazole, one(1) Sulfathiazole, four (4) phenylbutazone, and 327 Flunixin residue violations.

Table 48a, *Fast Antimicrobial Screen Test*, presents the screening test results by production class. Table 48b, *Specific FAST Violative Residue,* presents specific results for antibiotic, sulfonamide, phenylbutazone, and flunixin residues.

Table 48a
Fast Antimicrobial Screen Test
2008 Inspector Generated Sampling Results

Production Class	Number of samples	Number of animals with violations	Percent violations
Beef cows	4,635	52	1.12
Bison	2	0	0.00
Boars/stags	317	0	0.00
Bob veal	32,890	292	0.89
Bovine	13	1	7.69
Bulls	564	4	0.71
Dairy cows	80,092	788	0.98
Formula-fed veal	1,596	7	0.44
Goats	180	0	0.00
Heavy calves	797	14	1.63
Heifers	1,379	5	0.36
Lambs	370	1	0.27
Market hogs	5,210	2	0.04
Mature sheep	137	0	0.00
Non-formula-fed veal	257	4	1.56
Roaster pigs	301	0	0.00
Sows	3,019	1	0.03
Steers	3,266	11	0.34
Other*	364	0	0.00
TOTAL	135,389	1,182	0.87

Table 48b
Specific FAST Violative Residues
2008 Inspector Generated Sampling Results

Produc-tion class	Antibiotics, Sulfonamide and Non-steroidal Anti-inflammatory (NSAID) Compound [1]																			
	Amikacin	Ampicillin	Desfuroylcefti ofur (DCA or DCCD)	Dihydro Streptomycin	Flunixin	Gentamycin Sulfate	Neomycin	Oxytetracycline	Penicillin	Phenylbutazone	Sulfadiazine	Sulfadimethoxine	Sulfadoxine	Sulfamethazine	Sulfamethoxazole	Sulfathiazole	Tetracycline	Tilmicosin	Tylosin	Total
Beef Cows	0	0	2	0	7	10	0	11	25	1	0	10	1	8	0	0	1	6	0	82
Bob Veal	0	0	19	0	42	39	178	12	34	0	4	9	0	27	28	1	7	6	0	406
Bovine	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Bulls	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Dairy cows	1	8	69	3	269	57	25	46	350	3	0	193	0	34	0	0	21	6	1	1086
Formula Fed Veal	0	0	0	0	4	2	0	0	3	0	0	0	0	0	0	0	0	0	0	9
Heavy Calves	0	0	0	0	1	4	0	6	1	0	0	5	0	3	0	0	0	0	0	20
Heifers	0	0	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	2	0	6
Lamb	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Market hogs	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3
Non-FFV	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	2	0	6
Sows	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Steers	0	0	3	0	2	1	0	1	1	0	0	0	0	4	0	0	0	1	0	13
TOTAL	1	8	94	3	327	117	204	76	424	4	4	218	1	79	28	1	29	23	1	1642

1 - In the Inspector Generated Sampling plan, samples that are found to be FAST positive in the plant are further analyzed for flunixin and phenylbutazone (non-steroidal anti-inflammatory compounds) in the laboratory.

INSPECTOR GENERATED SAMPLING

- **SUSPECT ANIMALS, *continued***

SAMPLES ANALYZED BY THE FSIS LABORATORY

ANTIBIOTICS AND SULFONAMIDES (7-plate bioassay)

FSIS analyzed samples from 138 animals for antibiotics and sulfonamides. FSIS laboratories confirmed 10 violations in five (5) animals. There were one (1) Flunixin, three (3) Gentamycin Sulfate, one (1) Neomycin, three (3) Penicillin, one (1) Sulfadimethoxine, and one (1) Sulfamethazine residue violations. Table 49a, *Antibiotics and Sulfonamides,* presents testing results by production class. Table 49b, *Specific Antibiotic and Sulfonamide Violative Residues,* presents specific results detected within the class.

Table 49a
Antibiotics and Sulfonamides
2008 Inspector Generated Sampling Results

Production Class	Number of samples	Number of animals with violations	Percent violations
Beef cows	42	1	2.38
Bob veal	0	0	0.50
Bovine	2	0	0.00
Bulls	6	0	0.00
Dairy cows	39	3	7.69
Formula-fed veal	0	0	0.20
Heavy calves	4	0	0.00
Heifers	0	0	0.00
Lamb	4	0	0.00
Market hogs	37	1	0.00
Mature turkeys	0	0	2.70
Steers	2	0	0.20
Young chickens	2	0	0.00
Total	**138**	**5**	**3.62**

Table 49b

Specific Antibiotic and Sulfonamide Violative Residues
2008 Inspector Generated Sampling Results

Production Class	Antibiotic, Sulfonamide and Non-steroidal Anti-inflammatory (NSAID) Compounds						Total
	Flunixin	Gentam-ycin-Sulfate	Neom-ycin	Penicillin	Sulfadime-thoxine	Sulfameth-azine	
Beef cows	0	3	0	0	0	0	**3**
Dairy cows	1	0	1	3	1	0	**6**
Market hogs	0	0	0	0	0	1	**1**
Total	**1**	**3**	**1**	**3**	**1**	**1**	**10**

AVERMECTINS

Analyses were conducted in five (5) Bulls samples and no violations were found.

***beta*-AGONISTS (clenbuterol, cimaterol, ractopamine, salbutamol, and zilpaterol) .** Analyses were conducted in seven (7) Market hogs, one (1) Heifer, and one (1) Steer samples and no violations were found.

FLORFENICOL

Analysis was conducted in one (1) Beef cows sample, and no violation was found.

FLUNIXIN

Analysis was conducted in one (1) Formula fed veal sample and no violation was found.

PHENYLBUTAZONE

Analysis was conducted in one (1) Formula fed veal, and no violation was found.

SULFONAMIDES

Analyses were conducted in five (5) young turkey and one (1) market hog samples and no violations were found.

TRENBOLONE

Analyses were conducted in one (1) Heifer and one (1) Steer samples and no violations were found.

INSPECTOR GENERATED SAMPLING

• SUSPECT POPULATIONS

FSIS conducted testing of suspect populations for antibiotics and sulfonamides in bob veal; and antibiotics, sulfonamides, and *beta*-agonists in show animals.

FAST ANTIMICROBIAL SCREEN TEST (FAST) ON BOB VEAL

Fast Antimicrobial Screen Test was used to screen 32,890 bob veal calves for antibiotics and sulfonamides. The total bob veal calves tested included both testing of a suspect population and testing of suspect animals. Of the animals tested, FSIS laboratory confirmed 406 violations in 292 animals. The residue violations consisted of 19 (Desfuroylceftiofur DCA or DCCD), 39 Gentamycin Sulfate , 178 Neomycin , 12 Oxytetracycline, seven (7) Tetracycline , six (6) Tilmicosin, 34 Penicillin, four (4) Sulfadiazine, Nine (9) Sulfadimethoxine, 27 Sulfamethazine, 28 Sulfamethoxazole, one (1) Sulfathiazole, and 42 Flunixin

SHOW ANIMALS

FSIS conducted analyses for antibiotics and sulfonamides on three (3) goats, five (5) lambs, eighteen (18) market hogs, and six (6) steers. One Tetracycline violation was found in a market hog sample.

FSIS conducted analyses for clenbuterol, salbutamol, ractopamine, cimaterol, and zilpaterol (*beta*-agonists) on two (2) bovine, two (2) heifers, six (6) lambs, seven (7) market hogs, two (2) mature sheep, and nine (9) steers. No violations were found.

IMPORT REINSPECTION RESULTS

NORMAL

Table 50, *Normal Reinspection Results*, presents results for imported products subject to normal reinspection. The data includes the number of reported results, non-detects, non-violative positives, and violations found for each compound class tested. Table 51, *Total Samples from Normal Reinspection Sampling*, presents the total number of samples analyzed in the normal reinspection sampling.

Table 50
Normal Reinspection Results
2008 Import Residue Plan

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Argentina	Beef	Chlorinated CHCs	13	13	0	0	----------
		Chlorinated OPs	13	13	0	0	----------
		Sulfonamides	22	22	0	0	----------
		Avermectins	22	22	0	0	----------
	Total		**70**	**70**	**0**	**0**	
Australia	Beef	Chlorinated CHCs	88	87	1	0	----------
		Antibiotics (7-plate)	99	99	0	0	----------
		Chloramphenicol	22	22	0	0	----------
		Florfenicol	20	20	0	0	----------
		Chlorinated OPs	88	88	0	0	----------
		Ractopamine	1	1	0	0	----------
		Sulfonamides	113	113	0	0	----------
		Flunixin	19	19	0	0	----------
		Avermectins	112	112	0	0	----------
	Total		**562**	**561**	**1**	**0**	
	Steer	Chloramphenicol	1	1	0	0	----------
	Total		**1**	**1**	**0**	**0**	
	Veal	Antibiotics (7-plate)	17	17	0	0	----------
		Chloramphenicol	24	24	0	0	----------
		Thyreostats	16	16	0	0	----------
		Zeranol	18	18	0	0	----------
		Ractopamine	13	13	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Australia,	Veal	Sulfonamides	26	26	0	0	----------
cont.		Avermectins	32	32	0	0	----------
	Total		**146**	**146**	**0**	**0**	
	Sheep	Chlorinated CHCs	4	4	0	0	----------
		Chlorinated OPs	4	4	0	0	----------
		Avermectins	46	46	0	0	----------
	Total		**54**	**54**	**0**	**0**	
	Lamb	Chlorinated CHCs	68	67	1	0	----------
		Chlorinated OPs	70	70	0	0	----------
		Sulfonamides	1	1	0	0	----------
		Avermectins	60	60	0	0	----------
	Total		**199**	**198**	**1**	**0**	
	Goat	Chlorinated CHCs	8	8	0	0	----------
		Chlorinated OPs	8	8	0	0	----------
		Avermectins	9	9	0	0	----------
	Total		**25**	**25**	**0**	**0**	
Austria	Veal	Antibiotics	1	1	0	0	----------
		Zeranol	1	1	0	0	----------
	Total		**2**	**2**	**0**	**0**	
Brazil	Beef	Chlorinated CHCs	67	67	0	0	----------
		Chlorinated OPs	67	67	0	0	----------
		Sulfonamides	40	40	0	0	----------
		Avermectins	41	41	0	0	----------
	Total		**215**	**215**	**0**	**0**	
	Veal	Chlorphenicol	1	1	0	0	----------
		Sulfonamides	1	1	0	0	----------
		Avermectins	1	1	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Brazil, *cont.*	**Total**		**3**	**3**	**0**	**0**	
Canada	Horse	Antibiotics (7-plate)	9	9	0	0	----------
		Sulfonamides	9	9	0	0	----------
.	**Total**		**18**	**18**	**0**	**0**	
	Beef	Chlorinated CHCs	94	94	0	0	----------
		Antibiotics (7-plate)	87	87	0	0	----------
		Chloramphenicol	12	12	0	0	----------
		Florfenicol	9	9	0	0	----------
		Chlorinated OPs	94	94	0	0	----------
		Ractopamine	13	13	0	0	----------
		Thyreostats	2	2	0	0	----------
		Sulfonamides	91	91	0	0	----------
		Flunixin	11	11	0	0	----------
		Avermectins	97	97	0	0	----------
	Total		**510**	**510**	**0**	**0**	
	Veal	Antibiotics (7-plate)	95	95	0	0	----------
		Chloramphenicol	57	57	0	0	----------
		Zeranol	92	92	0	0	----------
		β Agonists	3	3	0	0	----------
		Ractopamine	76	76	0	0	----------
		Thyreostats	83	83	0	0	----------
		Sulfonamides	58	58	0	0	----------
		Avermectins	56	56	0	0	----------
	Total		**520**	**520**	**0**	**0**	
	Lamb	Avermectins	2	2	0	0	----------
	Total		**2**	**2**	**0**	**0**	
	Swine	Chlorinated CHCs	138	138	0	0	----------
		Antibiotics (7-plate)	8	8	0	0	----------
		Chlorinated OPs	138	138	0	0	----------
		Arsenic	9	9	0	0	----------
		β Agonists	2	2	0	0	----------
		Ractopamine	134	134	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Canada, *cont*		Sulfonamides	148	148	0	0	----------
	Total		**577**	**577**	**0**	**0**	
	Chicken	Chlorinated CHCs	10	10	0	0	----------
		Antibiotics (7-plate)	11	11	0	0	----------
		Chloramphenicol	10	10	0	0	----------
		Chlorinated OPs	10	10	0	0	----------
		Arsenic	11	11	0	0	----------
	Chicken,	Nitroimidazoles	12	12	0	0	----------
	cont.						
	Total		**64**	**64**	**0**	**0**	
	Turkey	Chlorinated CHCs	8	8	0	0	----------
		Antibiotics (7-plate)	8	8	0	0	----------
		Chloramphenicol	8	8	0	0	----------
		Chlorinated OPs	8	8	0	0	----------
		Arsenic	8	8	0	0	----------
		Sulfonamides	8	8	0	0	----------
	Total		**48**	**48**	**0**	**0**	
Costa Rica	Beef	Chlorinated CHCs	10	10	0	0	----------
		Antibiotics (7-plate)	17	17	0	0	----------
		Chloramphenicol	12	12	0	0	----------
		Florfenicol	18	18	0	0	----------
		Chlorinated OPs	10	10	0	0	----------
		Sulfonamides	12	12	0	0	----------
		Flunixin	17	17	0	0	----------
		Avermectins	21	21	0	0	----------
	Total		**117**	**117**	**0**	**0**	
Croatia	Swine	Chlorinated CHCs	6	6	0	0	----------
		Chlorinated OPs	6	6	0	0	----------
		Arsenic	1	1	0	0	----------
		Sulfonamides	8	8	0	0	----------
	Total		**21**	**21**	**0**	**0**	
Denmark	Swine	Chlorinated CHCs	26	26	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Denmark, *cont.*		Antibiotics (7-plate)	7	7	0	0	----------
		Chlorinated OPs	26	26	0	0	----------
		Arsenic	8	8	0	0	----------
		β Agonists	2	2	0	0	----------
		Ractopamine	13	13	0	0	----------
		Sulfonamides	19	19	0	0	----------
	Total		**101**	**101**	**0**	**0**	
England-Wales	Swine	β Agonists	2	2	0	0	----------
		Ractopamine	1	1	0	0	----------
	Total		**3**	**3**	**0**	**0**	
Finland	Swine	Chlorinated CHCs	2	2	0	0	----------
		Antibiotics (7-plate)	8	8	0	0	----------
		Chlorinated OPs	2	2	0	0	----------
		Arsenic	7	7	0	0	----------
		β Agonists	2	2	0	0	----------
		Ractopamine	6	6	0	0	----------
		Sulfonamides	7	7	0	0	----------
	Total		**34**	**34**	**0**	**0**	
Germany	Swine	Chlorinated CHCs	7	7	0	0	----------
		Antibiotics (7-plate)	1	1	0	0	----------
		Chlorinated OPs	7	7	0	0	----------
		Sulfonamides	8	8	0	0	----------
	Total		**23**	**23**	**0**	**0**	
Great Britain	Swine	Antibiotics (7-plate)	3	3	0	0	----------
		Arsenic	10	10	0	0	----------
		Sulfonamides	7	7	0	0	----------
	Total		**20**	**20**	**0**	**0**	
Honduras	Beef	Chlorinated CHCs	12	12	0	0	----------
		Antibiotics (7-plate)	14	14	0	0	----------
		Chloramphenicol	8	8	0	0	----------
		Florfenicol	12	12	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Honduras,	Beef	Chlorinated OPs	12	12	0	0	----------
cont		Sulfonamides	8	8	0	0	----------
		Flunixin	14	14	0	0	----------
		Avermectins	17	17	0	0	----------
	Total		**97**	**97**	**0**	**0**	
Hungary	Swine	Sulfonamides	8	8	0	0	----------
	Total		**8**	**8**	**0**	**0**	
Iceland	Swine	Arsenic	1	1	0	0	----------
		Sulfonamides	1	1	0	0	----------
	Total		**2**	**2**	**0**	**0**	
Ireland	Swine	Chlorinated CHCs	6	3	3	0	----------
		Antibiotics (7-plate)	17	17	0	0	----------
		Chlorinated OPs	4	4	0	0	----------
		Arsenic	8	8	0	0	----------
		β Agonists	4	4	0	0	----------
		Ractopamine	13	13	0	0	----------
		Sulfonamides	8	8	0	0	----------
	Total		**60**	**57**	**3**	**0**	
Israel	Chicken	Arsenic	9	9	0	0	----------
	Total		**9**	**9**	**0**	**0**	
	Turkey	Chlorinated CHCs	1	1	0	0	----------
		Chlorinated OPs	1	1	0	0	----------
		Arsenic	10	10	0	0	----------
		Sulfonamides	10	10	0	0	----------
	Total		**22**	**22**	**0**	**0**	
Italy	Swine	Chlorinated CHCs	18	18	0	0	----------
		Chlorinated OPs	18	18	0	0	----------
		Sulfonamides	8	8	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Italy, *cont.*	**Total**		**44**	**44**	**0**	**0**	
Japan	Beef	Chlorinated CHCs	9	9	0	0	----------
		Antibiotics (7-plate)	11	11	0	0	----------
		Chloramphenicol	8	8	0	0	----------
		Florfenicol	10	10	0	0	----------
		Chlorinated OPs	9	9	0	0	----------
		Sulfonamides	8	8	0	0	----------
		Flunixin	12	12	0	0	----------
		Avermectins	8	8	0	0	----------
	Total		**75**	**75**	**0**	**0**	
Mexico	Beef	Chlorinated CHCs	16	16	0	0	----------
		Antibiotics (7-plate)	43	43	0	0	----------
		Chloramphenicol	8	8	0	0	----------
		Florfenicol	39	39	0	0	----------
		Chlorinated OPs	16	16	0	0	----------
		Sulfonamides	8	8	0	0	----------
.	Beef,	Flunixin	43	43	0	0	----------
	cont.	Avermectins	8	8	0	0	----------
	Total		**181**	**181**	**0**	**0**	
	Goat	Avermectins	8	8	0	0	----------
	Total		**8**	**8**	**0**	**0**	
	Swine	Chlorinated CHCs	15	5	10	0	----------
		Antibiotics (7-plate)	11	11	0	0	----------
		Chlorinated OPs	7	7	0	0	----------
		Arsenic	8	8	0	0	----------
		β Agonists	1	1	0	0	----------
		Ractopamine	10	10	0	0	----------
		Sulfonamides	8	8	0	0	----------
	Total		**60**	**50**	**10**	**0**	
Netherlands	Swine	Antibiotics (7-plate)	7	7	0	0	----------
		Arsenic	8	8	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Netherlands,	Swine	Ractopamine	7	7	0	0	----------
cont.		Sulfonamides	9	9	0	0	----------
	Total		**31**	**31**	**0**	**0**	
New Zealand	Beef	Chlorinated CHCs	101	84	17	0	----------
		Antibiotics (7-plate)	56	56	0	0	----------
		Chloramphenicol	11	11	0	0	----------
		Florfenicol	9	9	0	0	----------
		Chlorinated OPs	101	101	0	0	----------
		β Agonists	1	1	0	0	----------
		Ractopamine	2	2	0	0	----------
		Thyreostats	1	1	0	0	----------
		Sulfonamides	55	55	0	0	----------
		Flunixin	14	14	0	0	----------
		Avermectins	54	54	0	0	----------
	Total		**405**	**388**	**17**	**0**	
	Veal	Antibiotics (7-plate)	48	48	0	0	----------
		Chloramphenicol	42	42	0	0	----------
		Zeranol	52	52	0	0	----------
		β Agonists	26	26	0	0	----------
		Ractopamine	18	18	0	0	----------
	Veal, *cont.*	Thyreostats	46	46	0	0	----------
		Sulfonamides	45	45	0	0	----------
		Avermectins	45	45	0	0	----------
	Total		**322**	**322**	**0**	**0**	
	Goat	Chlorinated CHCs	1	1	0	0	----------
		Chlorinated OPs	1	1	0	0	----------
		Avermectins	9	9	0	0	----------
	Total		**11**	**11**	**0**	**0**	
	Swine	Sulfonamides	1	1	0	0	----------
	Total		**1**	**1**	**0**	**0**	
Nicaragua	Beef	Chlorinated CHCs	13	13	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Nicaragua,	Beef	Antibiotics (7-plate)	13	13	0	0	----------
cont.		Chloramphenicol	12	12	0	0	----------
		Florfenicol	14	14	0	0	----------
		Chlorinated OPs	13	13	0	0	----------
		Sulfonamides	12	12	0	0	----------
		Flunixin	14	14	0	0	----------
		Avermectins	12	12	0	0	----------
	Total		**103**	**103**	**0**	**0**	
Poland	Swine	Chlorinated CHCs	11	11	0	0	----------
		Chlorinated OPs	11	11	0	0	----------
		Sulfonamides	8	8	0	0	----------
	Total		**30**	**30**	**0**	**0**	
Spain	Swine	Chlorinated CHCs	6	6	0	0	----------
		Chlorinated OPs	6	6	0	0	----------
		Arsenic	1	1	0	0	----------
		Sulfonamides	9	9	0	0	----------
	Total		**22**	**22**	**0**	**0**	
Sweden	Swine	Arsenic	7	7	0	0	----------
		β Agonists	3	3	0	0	----------
		Ractopamine	7	7	0	0	----------
		Sulfonamides	7	7	0	0	----------
	Swine	Chlorinated CHCs	1	1	0	0	----------
	cont.	Chlorinated OPs	1	1	0	0	----------
		Antibiotics (7-plate)	10	10	0	0	----------
.	**Total**		**36**	**36**	**0**	**0**	
Uruguay	Beef	Chlorinated CHCs	40	40	0	0	----------
		Antibiotics (7-plate)	32	32	0	0	----------
		Chloramphenicol	9	9	0	0	----------
		Florfenicol	8	8	0	0	----------
		Chlorinated OPs	40	40	0	0	----------
		Sulfonamides	29	29	0	0	----------
		Flunixin	8	8	0	0	----------
		Avermectins	37	36	0	1	Ivermectin

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Uruguay,	**Total**		**203**	**202**	**0**	**1**	
cont.							
Yugoslavia	Beef	Sulfonamides	1	1	0	0	----------
		Avermectins	1	1	0	0	----------
	Total		**2**	**2**	**0**	**0**	

Table 51
Total Samples from Normal Reinspection Sampling
2008 Import Residue Plan

Total (Normal Reinspection)	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations
	5067	5034	32	1

INCREASED

Table 52, *Increased Reinspection Results*, presents results for import products subject to increased reinspection. The data includes the number of reported results, non-detects, non-violative positives, and violations found for each compound class tested by product class. Table 53, *Total Samples from Increased Reinspection Sampling*, presents the total number of samples analyzed in the increased reinspection sampling.

Table 52
Increased Reinspection Results
2008 Import Residue Plan

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Australia	Beef	Chlorinated CHCs	15	15	0	0	----------
		Chlorinated OPs	15	15	0	0	----------
	Total		**30**	**30**	**0**	**0**	
Brazil	Beef	Chlorinated CHCs	10	10	0	0	----------
		Chlorinated OPs	10	10	0	0	----------
	Total		**20**	**20**	**0**	**0**	
Canada	Lamb	Chlorinated CHCs	1	1	0	0	----------
		Chlorinated OPs	1	1	0	0	----------
	Total		**2**	**2**	**0**	**0**	
Italy	Swine	Chlorinated CHCs	1	1	0	0	----------
		Chlorinated OPs	1	1	0	0	----------
	Total		**2**	**2**	**0**	**0**	
New Zealand	Veal	β Agonists	1	1	0	0	----------
	Total		**1**	**1**	**0**	**0**	

Table 53
Total Samples from Increased Reinspection Sampling
2008 Import Residue Plan

Total (Intensified Reinspection)	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations
	55	55	0	0

INTENSIFIED

Table 54, *Intensified Reinspection Results*, presents results for import products subject to intensified reinspection. The data includes the number of reported results, non-detects, non-violative positives, and violations found for each compound class tested by product class. Table 55, *Total Samples from Intensified Reinspection Sampling*, presents the total number of samples analyzed in the increased reinspection sampling.

Table 54
Intensified Reinspection Results
2008 Import Residue Plan

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Costa Rica	Beef	Avermectins	6	6	0	0	----------
	Total		**6**	**6**	**0**	**0**	
Finland	Swine	Arsenic	1	1	0	0	----------
		Sulfonamides	1	1	0	0	----------
	Total		**2**	**2**	**0**	**0**	
Honduras	Beef	Chloramphenicol	2	2	0	0	----------
		Florfenicol	2	2	0	0	----------
		Sulfonamides	1	1	0	0	----------
		Avermectins	9	9	0	0	----------
	Total		**14**	**14**	**0**	**0**	
Ireland	Swine	Arsenic	1	1	0	0	----------
		Sulfonamides	1	1	0	0	----------

Country	Product Class	Compound Class	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations	Specific Compound (Violations)
Ireland,	**Total**		**2**	**2**	**0**	**0**	
cont.							
Mexico	Beef	Avermectins	1	1	0	0	----------
	Total		**1**	**1**	**0**	**0**	
New Zealand	Veal	Antibiotics (7-plate)	2	2	0	0	----------
		Zeranol	2	2	0	0	----------
		Thyreostats	2	2	0	0	----------
	Total		**6**	**6**	**0**	**0**	
Poland	Beef	Avermectins	1	1	0	0	----------
	Total		**1**	**1**	**0**	**0**	
Uruguay	Beef	Avermectins	31	30	0	1	Ivermectin
	Total		**31**	**30**	**0**	**1**	

Table 55
Total Samples from Increased Reinspection Sampling
2008 Import Residue Plan

Total (Intensified Reinspection)	Number of Results	Number of Non-Detected	Number of Non Violative Positives	Number of Violations
	63	62	0	1

APPENDIX I
Analytical Methods

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 : *beta*-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 Oxytetracycline Tetracycline	7-Plate Bioassay	Bioassay	HPLC		0.05 ppm 0.40 ppm	0.5 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*
Antibiotics: Macrolides	Clindamycin	7-Plate Bioassay	Bioassay	HPLC/MS-MS		0.25 ppm	0.1 ppm
	Erythromycin						0.1 ppm
	Lincomycin						0.1 ppm
	Pirlimycin		HPLC- Ion Pairing			300 ppb (M) 600 ppb (L,K)	0.1 ppm
	Tilmycosin						0.1 ppm
	Tulathromycin						1 ppm
	Tylosin		Bioassay			1.0 ppm	0.1 ppm
Antibiotics: Aminoglycosides	Amikacin	7-Plate Bioassay	Bioassay	HPLC/MS-MS		1.0 ppm	1.0 ppm (L,K), 0.4 ppm (M)
	Apramycin						0.4 ppm (K) 0.1 ppm (L,M)
	Dihydrostreptomycin						0.4 ppm (L,K,M)
	Gentamycin		Bioassay			0.5 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			2.5 ppm	0.1ppm (K,M), 0.4 (L)
	Spectinomycin						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
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: Fluoroquinolones	Ciprofloxacin Danofloxacin Desethylene diprofloxacin Desmethyl danofloxacin Difloxacin Enrofloxacin Norfloxacin Sarafloxacin	7-Plate Bioassay		HPLC/MS-MS			25 ppb
Arsenicals	Arsenicals		AAS	AAS		0.2 ppm	0.2 ppm
Avermectins	Ivermectin Doramectin Moxidectin		HPLC	HPLC/APCI-MS		7.5 ppb	25 ppb
beta -Agonists	Cimaterol	LC/MS/MS	HPLC	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
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	1.0 ppb 5.0 ppb	0.5 ppb	1.0 ppb (L,M)
	Zeranol	GC-MS	GC-MS	GC-MS		1.0 ppb	1.0 ppb (L,M)
	alpha-Trenbolone			GC/MS-MS			5.0 ppb (L)
	beta-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)
Nitroimi-dazoles	Hydoxydimetridazole		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 Sulfadiazine Sulfathiazole Sulfamerazine Sulfamethazine Sulfachloropyridazine Sulfamethoxypyridazine Sulfaquinoxaline Sulfadimethoxine Sulfaethoxypyridazine Sulfaphenazole Sulfatroxazole Sulfisoxazole Sulfadoxine		TLC	GC/ESI-MS		0.08 ppm	0.1 ppm

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)*
Thyreostats	2-Mercaptobenzimidazole 6-Methyl-2-thiouracil 2-Mercapto-1-methylimidazole 6-Phenyl-2-thiouracil 6-Propyl-2-thiouracil 2-Thiouracil			HPLC/MS-MS			25 ppb
CHCs/COPs/PCBs	Aldrin	GC-ECD	GC-ECD		0.10 ppm	0.10 ppm	
	alpha-BHC				0.10 ppm	0.10 ppm	
	beta-BHC				0.10 ppm		
	delta-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		
	cis-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	*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		
	Oxychlordane				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				0.10ppm	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				0.0.4 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 Chromatoraphy
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 II
Statistical Table

Statistical Table

Table AII, *Statistical Table,* indicates the number of samples required to ensure detection of a violation that affects a given percentage of the sampled population. Statistically, for a Binomial distribution with sample size "n", and violation rate "v" (in decimal number), 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% (i.e. 0.01), the probabilities of detecting at least one violation with sampling levels of 230, 300 are 0.90 and 0.95, respectively.

Table AII
Statistical Table
2007 FSIS National Residue Program

Percentage % Violative in the Sample (v)	Probability (p)of detecting at least one violation in (n) samples			
	0.90	**0.95**	**0.99**	**0.999**
	Sample size required "n"			
10	22	29	44	66
5	45	59	90	135
1	230	300	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

Procedure to calculate the required sample size

$1 - p = (1 - v)^n$ ← Subtract one from both side of the equation.

$\log(1 - p) = \log(1 - v)^n$ ← Apply Logarithmic function to both side of the equation.

$\log(1 - p) = n * \log(1 - v)$ ← A logarithmic function property.

$n = \dfrac{\log(1 - p)}{\log(1 - v)}$ ← Sample size based on Violation rate (v) and Probability of detecting (p).

APPENDIX III
Summary of Scheduled Sampling Data from 2005 to 2007

SUMMARY OF SCHEDULED SAMPLING DATA FROM 2005 to 2007

Antibiotics (7-plate bioassay)

Production Class	CY 2007			CY 2006			CY 2005		
	Number of Samples	Number of Violations	Specific Antibiotic Violations	Number of Samples	Number of Violations	Specific Antibiotic Violations	Number of Samples	Number of Violations	Specific Antibiotic Violations
Beef cows	316	0	----------	326	0	----------	345	0	----------
Boars/Stags	364	0	----------	267	0	----------	----------	----------	----------
Bob veal	----------	----------	----------	278	11	1 gentamicin, 9 neomycin, 1 oxytetracycline	303	24	22 neomycin, 1 gentamicin, 1 penicillin
Dairy cows	318	0	----------	310	4	3 gentamicin, 1 penicillin	293	0	----------
Formula-fed veal	343	0	----------	323	0	----------	102	1	1 neomycin
Heavy calves	237	1	1 oxytetracycline	220	3	1 gentamicin, 2 neomycin	211	1	1 gentamicin
Heifers	302	0	----------	323	0	----------	445	0	----------
Horses	44	0	----------	112	0	----------	76	0	----------
Lambs	----------	----------	----------	----------	----------	----------	----------	----------	----------
Market hogs	----------	----------	----------	----------	----------	----------	233	0	----------
Mature chickens	----------	----------	----------	----------	----------	----------	----------	----------	----------

Antibiotics, ***continuation***

Production Class	CY 2007			CY 2006			CY 2005		
	Number of Samples	Number of Violations	Specific Antibiotic Violations	Number of Samples	Number of Violations	Specific Antibiotic Violations	Number of Samples	Number of Violations	Specific Antibiotic Violations
Non-formula-fed veal	255	3	3 gentamicin	200	6	3 gentamicin, 3 neomycin	133	5	3 neomycin, 2 gentamicin
Roaster pigs	249	0	----------	241	0	----------	----------	----------	----------
Sows	304	0	----------	300	0	----------	229	0	----------
Young chickens	311	0	----------	330	0	----------	----------	----------	----------
Young turkeys	329	0	----------	326	0	----------	----------	----------	----------

Arsenic

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Egg products	------	--------	------	--------	25	0
Goats	------	--------	------	--------	------	--------
Market hogs	291	0	301	0	------	--------
Mature chickens	318	0	297	0	------	--------
Young chickens	297	0	349	0	------	--------
Young turkeys	------	--------	------	--------	------	--------

Avermectins

Production Class	CY 2007			CY 2006			CY 2005		
	Number of Samples	Number of Violations	Specific Avermectins Violations	Number of Samples	Number of Violations	Specific Avermectins Violations	Number of Samples	Number of Violations	Specific Avermectins Violations
Beef cows	-------	------	----------	-------	------	----------	-------	------	----------
Bulls	302	1	1 ivermectin	309	0	-------	316	1	1 ivermectin
Dairy cows	320	0	-------	-------	-------	-------	-------	-------	-------
Goats	240	2	2 moxidectin	240	6	1 ivermectin, 5 moxidectin	180	4	4 moxidectin
Heavy calves	337	3	1 ivermectin, 2 doramectin	234	0	-------	200	3	3 ivermectin
Heifers	305	0	-------	321	0	-------	-------	------	----------
Horses	54	0	-------	113	0	-------	76	0	----------
Lambs	268	0	-------	323	1	1 doramectin	160	1	1 moxidectin
Mature sheep	227	0	-------	249	1	1 ivermectin	51	0	----------
Non-formula-fed veal	298	2	2 ivermectin	173	1	1 ivermectin	69	0	----------
Steers	303	1	1 ivermectin	313	0	-------	1,046	1	1 ivermectin

***beta*-Agonists**
(clenbuterol, salbutamol, and cimaterol)

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Bob veal	------	--------	224	0	------	--------
Formula-fed veal	333	0	247	0	1,020	0
Heifers	306	0	293	0	------	--------
Market hogs	285	0	------	--------	------	--------
Non-formula-fed veal	367	0	175	1 salbutamol	------	--------
Steers	------	--------	------	--------	------	--------

(ractopamine)

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Formula-fed veal	333	0	257	0	109	0
Heifers	306	0	4	0	------	--------
Market hogs	285	0	------	--------	74	0
Non-formula fed veal	367	0	201	0	------	--------
Steers	------	--------	------	--------	240	0

Carbadox

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Market hogs	301	1	------	--------	243	0
Roaster pigs	322	1	------	--------	------	--------

Chloramphenicol

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Dairy cows	335	0	254	0	204	0
Formula-fed veal	341	0	252	0	92	0
Mature chickens	------	--------	------	--------	86	0
Mature turkeys	------	--------	------	--------	101	0
Non-formula-fed veal	------	--------	------	--------	118	0
Young chickens	309	0	265	0	211	0
Young turkeys	319	0	266	0	81	0

Chlorinated hydrocarbons, Chlorinated organophosphates, Organophosphates, Pyrethroids, Environmental contaminants

Production Class	CY 2007			CY 2006			CY 2005		
	Number of Samples	Number of Violations	Specific Violations	Number of Samples	Number of Samples	Specific Violations	Number of Samples	Number of Violations	Specific Violations
Beef cows	315	0	----------	314	0	---------	313	0	----------
Boars/Stags	397	4	1 DDT, 2 heptachlor, 1 HCB	284	6	1 halowax, 3HCB, 1 PBB, 1 PBDE,	209	0	----------
Bulls	---------	----------	----------	---------	----------	----------	304	2	1 coumaphos, 1 PBDE
Dairy cows	330	0	----------	304	2	1 dieldrin, 1 permethrin	265	0	----------
Egg products	---------	----------	----------	---------	----------	----------	178	0	----------
Formula-fed veal	---------	----------	----------	---------	----------	----------	257	0	----------
Goats	264	1	1 chlordane	211	0	---------	199	2	2 PBDE
Heavy calves	---------	----------	----------	---------	----------	----------	205	1	1 Dieldrin
Heifers	309	0	----------	333	0	---------	537	0	----------
Horses	50	0	----------	281	1	1 PBDE	78	0	----------

Note: Currently, there are no established tolerances or action levels for PBDE in meat, poultry, and egg products. FSIS determined at the time that these PBDE levels were found that PBDEs levels at or above the Minimum Proficiency Level (MPL) represented a public health concern and merited to be reported to FDA as violative for possible identification of sources of contamination. This determination is currently under review.

Chlorinated hydrocarbons, Chlorinated organophosphates, Organophosphates, Pyrethroids, Environmental contaminants, ***continuation***

Production Class	CY 2007			CY 2006			CY 2005		
	Number of Samples	Number of Violations	Specific Violations	Number of Samples	Number of Violations	Specific Violations	Number of Samples	Number of Violations	Specific Violations
Lambs	246	1	1 methoxychlor	221	0	---	230	0	---
Market hogs	---	---	---	---	---	---	356	0	---
Mature chickens	---	---	---	---	---	---	77	0	---
Mature sheep	240	0	---	208	1	1 PBB	116	0	---
Mature turkeys	---	---	---	---	---	---	80	0	---
Non-formula-fed veal	---	---	---	203	0	---	174	0	---
Roaster pigs	---	---	---	---	---	---	217	0	---
Sows	323	0	---	286	2	1 HCB, 1 PBB	215	0	---
Steers	---	---	---	---	---	---	556	0	---
Young chickens	---	---	---	---	---	---	426	0	---
Young turkeys	---	---	---	---	---	---	280	0	---

Florfenicol

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Dairy cows	373	0	270	0	157	1
Formula-fed veal	340	1	-----	-------	114	0
Non-formula fed veal	292	4	78	2	84	5

Flunixin

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Beef cows	-----	-------	306	0	------	-------
Bulls	-----	-------	232	1	-----	-------
Dairy cows	-----	-------	292	4	-----	-------
Heavy calves	-----	-------	214	0	-----	------

Melengestrol acetate (MGA)

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Heifers	309	0	329	0	350	0

Nitrofurans

Production Class	CY 2007			CY 2006			CY 2005		
	Number of Samples	Number of Violations	Specific Nitrofurans Violations	Number of Samples	Number of Violations	Specific Nitrofurans Violations	Number of Samples	Number of Violations	Specific Nitrofurans Violations
Dairy cows	----------	----------	----------	285	1	1 furazolidone	253	1	1 furazolidone
Formula-fed veal	----------	----------	----------	257	0	----------	133	0	----------
Heifers	----------	----------	----------	321	0	----------	336	0	----------
Market hogs	302	0	----------	----------	----------	----------	----------	----------	----------
Roaster pigs	328	0	----------	----------	----------	----------	----------	----------	----------
Steers	----------	----------	----------	----------	----------	----------	330	0	----------
Sows	325	0	----------	----------	----------	----------	----------	----------	----------

Nitroimidazoles

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Young chickens	306	0	----------	----------	----------	----------
Young turkeys	----------	----------	337	0	251	0

Phenylbutazone (ELISA)

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Beef cows	-----	------	329	0	-----	------
Bulls	-----	------	322	0	-----	------
Dairy cows	-----	------	298	0	-----	------
Formula fed veal	-----	------	265	0	-----	------
Heavy calves	-----	------	190	0	-----	------
Heifers	-----	------	282	0	-----	------
Non-formula fed veal	-----	------	165	0	-----	------
Sow	-----	------	-----	------	-----	------
Steers	-----	------	321	0	874	0

Sulfonamides

Production Class	CY 2007			CY 2006			CY 2005		
	Number of Samples	Number of Violations	Specific sulfonamides Violations	Number of Samples	Number of Violations	Specific sulfonamides Violations	Number of Samples	Number of Violations	Specific sulfonamides Violations
Beef cows	312	0	----------	317	0	----------	328	0	----------
Boars/Stags	----------	----------	----------	----------	----------	----------	152	1	1 sulfamethazine
Bob veal	315	2	1 sulfadimethoxine, 1 sulfamethazine	300	3	1 sulfadimethoxine, 2 sulfamethazine	445	1	1 sulfadimethoxine
Bulls	302	0	----------	297	0		304	0	----------
Dairy cows	336	3	1 sulfadimethoxine, 2 sulfamethazine	317	3	1 sulfadimethoxine, 2 sulfamethazine	289	0	----------
Egg products	----------	----------	----------	----------	----------	----------	189	0	----------
Formula-fed veal	----------	----------	----------	253	0	----------	93	0	----------
Goats	317	0	----------			----------			
Heavy calves	337	1	1 sulfadimethoxine	222	1	1 sulfamethazine	194	0	----------
Lambs	342	0	----------	----------	----------	----------	159	0	----------
Market hogs	291	2	2 sulfamethazine	267	1	1 sulfamethazine	348	3	3 sulfamethazine
Mature chickens	----------	----------	----------	----------	----------	----------	----	-----	----------
Mature sheep	283	0	----------	----------	----------	----------	----------	----------	----------
Mature turkeys	328	0	----------	261	0	----------	76	0	----------
Non-formula-fed veal	382	2	1 sulfadimethoxine, 1 sulfamethazine	165	0	----------	122	0	----------
Roaster pigs	327	4	4 sulfamethazine	311	8	1 sulfadimethoxine, 7 sulfamethazine	209	4	3 sulfamethazine , 1 sulfathiazole
Steers	303	1	1 sulfamethazine	298	1	1 sulfamethazine	517	0	----------
Young chickens	297	0	----------	----------	----------	----------	----------	----------	----------
Young turkeys	320	1	1 sulfaquinoxaline	----------	----------	----------	----------	----------	----------

Thyreostats

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Formula-fed veal	342	0	-----	-------	-----	------
Heifers	-----	-------	-----	-------	302	0
Market hogs	-----	-------	291	0	-----	------
Steers	-----	-------	-----	-------	336	0

Trenbolone

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Formula-fed veal	258	0	323	0	1,076	0
Non-formula fed veal	-----	------	174	2	-----	------

Zeranol

Production Class	CY 2007		CY 2006		CY 2005	
	Number of Samples	Number of Violations	Number of Samples	Number of Violations	Number of Samples	Number of Violations
Formula-fed veal	261	0	323	0	1,106	0

Addendum

This addendum clarifies the status of exploratory assessments from previous editions of the FSIS National Residue Program Sampling Plans (Blue Books):

1- Bob Veal Antibiotic Retain (BOVAR): 200 bob veal samples were tested and reported in the 2007 Red Book. No samples were collected in calendar year (CY) 2008.
2- Berenil: The 240 bull samples scheduled for collection and analysis in CY 2006 were collected and sent for analysis to a FDA Laboratory. FDA reported to FSIS that no violations were detected.
3- Small Plant Retain and Test (SPRAT): No samples were collected for this exploratory assessment. The SPRAT sampling and testing protocol was used as a model for developing the protocol for BOVAR.