

4 UNITED STATES DEPARTMENT OF AGRICULTURE
FOOD SAFETY AND INSPECTION SERVICE
WASHINGTON, DC

FSIS NOTICE

24-18

4/30/18

FISCAL YEAR 2018 DIOXIN SURVEY

NOTE: DO NOT IMPLEMENT THIS NOTICE UNTIL JUNE 1, 2018.

I. PURPOSE

This notice informs inspection program personnel (IPP) assigned to federally inspected livestock and poultry slaughter establishments that the Fiscal Year (FY) 2018 Dioxin Survey will be conducted over 12 months and will gather data about dioxin levels in U.S. beef, pork, and poultry.

II. BACKGROUND

A. FSIS, in conjunction with the USDA Agricultural Research Service (ARS), Red River Valley Agricultural Research Center in Fargo, ND, is conducting the FY 2018 Dioxin Survey to determine levels of dioxins and dioxin-like compounds in the U.S. domestic meat and poultry products FSIS regulates. This is the next survey in the recurring five-year cycle of dioxin surveys that FSIS conducts with other federal partners, including ARS, the Environmental Protection Agency (EPA), and the Food and Drug Administration (FDA). The previous dioxin surveys were conducted in 2003, 2008, and 2013. Dioxins are a group of compounds of public health concern. These compounds are ubiquitous but generally occur at very low levels throughout the environment as persistent environmental contaminants.

B. FSIS plans to extend dioxin sampling to Siluriformes fish and will issue instructions to IPP on Siluriformes fish sampling for the 2018 Dioxin Survey in a separate notice.

III. REFERENCES AND REVIEW OF MATERIALS

Upon issuance of this notice, IPP assigned to establishments that are eligible to participate in the FY 2018 Dioxin Survey are to become familiar with the information provided in this notice and the following FSIS issuances:

[FSIS Directive 7355.1](#), *Use of Sample Seals for Laboratory Samples and Other Applications*.

[FSIS Directive 13,000.2](#), *Performing Sampling Tasks in Official Establishments Using the Public Health Information System*.

IV. AWARENESS MEETING WITH PLANT MANAGEMENT

A. Upon issuance of this notice, the Inspector-in-Charge (IIC) at an establishment that slaughters one or more livestock or poultry classes eligible for the FY 2018 Dioxin Survey will conduct an awareness meeting with establishment management to inform them of the survey.

DISTRIBUTION: Electronic

NOTICE EXPIRES: 5/1/19

OPI: OPPD

B. The IIC is to advise establishment management that it is eligible and may be selected for sampling. If the establishment is selected for sampling:

1. Sample collection will begin on or after June 1, 2018.
2. The FY 2018 Dioxin Survey will continue for approximately 12 months;
3. IPP will collect 0.5 (one-half) pound of fat tissue from the slaughter class designated in the sampling task (steers, heifers, dairy cows, market swine, young chickens, and young turkeys), as assigned. In cases where IPP also receive a paired sampling task for liver for the same slaughter class as the fat sample (e.g., steer), IPP are to collect 0.5 (one-half) pound of liver tissue from the same animal. Liver sampling tasks will only be assigned for the cattle classes described in Section V;
4. IPP will collect and record all animal identification information as part of the sampling task;
5. Individual sample results from the FY 2018 Dioxin Survey will not be the basis for regulatory actions;
6. Carcasses selected for sampling under this project do not need to be held pending test results reporting; and
7. Sample results for the FY 2018 Dioxin Survey will not be reported through Public Health Information System (PHIS) but will be posted to the FSIS Web site as aggregate data once the project is completed.

V. SAMPLE TASK ASSIGNMENT

A. IPP will receive FY 2018 Dioxin Survey sample requests through PHIS with one or more of the following sampling project codes, as applicable:

1. Cattle – Steer: **DIOX_ST_F** or **DIOX_ST_FL**
2. Cattle – Heifer: **DIOX_HF_F** or **DIOX_HF_FL**
3. Cattle – Dairy Cow: **DIOX_DC_FL**
4. Swine – Market Swine: **DIOX_MS_F**
5. Young Chicken: **DIOX_YC_F**
6. Young Turkey: **DIOX_YT_F**

B. The sample request will appear in PHIS as a sampling task on the establishment task list. The IPP are to add the task to their task calendar and follow the instructions in [FSIS Directive 13,000.2](#) for completing the task.

C. If an establishment receives a paired sample (fat sample and liver sample), one sampling task will appear in PHIS (e.g., DIOX_ST_FL). IPP are to add the task to the task calendar and follow the instructions in [FSIS Directive 13,000.2](#) for scheduling and completing the task.

D. IPP have 37 days from the date of the sample request (sampling window) to collect and ship the sample to the ARS laboratory. IPP are to collect the sample during the 37-day sampling window. After this 37-day window has closed, IPP will no longer be able to collect the sample.

VI. SAMPLING SUPPLIES FOR FY 2018 DIOXIN SURVEY

A. Approximately one week before the sampling task appears on the task list, IPP will receive the dioxin survey sampling supplies, which will be labeled “ARS-Special Project.” If supplies do not arrive within one week of the scheduled dioxin survey sample date for the establishment, IPP are to contact the FSIS Midwestern Laboratory (MWL) via email using the following email address:

[FSIS – Sampling Supplies – Midwestern Lab.](#)

IPP are to include the establishment name and number, IPP name and phone number and the project code, “ARS Special Project” in the request.

B. The shipping container will contain the following supplies:

1. FSIS Laboratory Sample Container Seal (FSIS Form 7355-2A/2B);
2. Sample collection instruction sheet, “Collection of Fat and/or Liver for Dioxin Testing”;
3. Information sheet for the Establishment (Attachment 1);
4. List of Contact Persons to provide assistance during the survey;
5. Absorbent pad/paper towel;
6. Gel pack;
7. Laboratory gloves;
8. Glass jar(s) with Teflon-coated lid(s) (fat/liver sample container);
9. Bubble wrap to protect the glass jar(s);
10. Rubber bands;
11. 10"x12" zipper lock plastic bag for shipment of glass jar containing fat/liver sample(s);
12. Plastic sleeve for sample form; and
13. FedEx Air bill.

C. If any of the supplies listed above are damaged or missing from the shipping container, IPP are to contact the MWL using the instructions provided in Section VI.A.

D. If the slaughter class designated for sampling is not being slaughtered during the sample collection window, IPP are to delete the task from the task list and select the appropriate reason for deleting. If the sampling task has been scheduled on the task calendar but cannot be completed within the sample collection window, IPP are to cancel the sampling task. IPP are to following the instructions provided in [FSIS Directive 13.000.2](#) for deleting or cancelling sampling tasks.

E. IPP are to return any unused shipping containers and sampling supplies for this project, including the ARS Laboratory FedEx Air bill, to the MWL. IPP are to send a request to the MWL for a pre-addressed return FedEx ground- shipping bill, using the email address provided in Section VI.A.

VII. COLLECTING THE SAMPLE

A. IPP are to refer the establishment to the information in Attachment 1, "Information for Establishments on the Fiscal Year (FY) 2018 Dioxin Survey" prior to sample collection.

B. When collecting the fat sample, IPP are to prevent contamination of the glass sampling jar and sample collection equipment, as that may affect the test results.

1. IPP are **not** to use paper towels and are **not** to wipe gloved hands or knife with paper towels. Paper towels may be contaminated with dioxin and polychlorinated biphenyls (PCBs). Low levels of dioxin are often present in the environment.
2. IPP are **not** to open the glass sampling jar until they start to remove the fat or liver sample from the carcass.
3. IPP are to transfer the tissue sample directly from the carcass to the glass jar provided, and close the jar immediately. IPP are to use separate glass sampling jars for fat and liver samples. Do not put liver and fat samples in the same glass sampling jar.

C. If the establishment does not allow glass in the production area, IPP are to transfer the specimen from the carcass onto an acceptable clean and dust-free material, such as a stainless steel container or aluminum foil, transport the sample to an acceptable area in the establishment and place it in the glass sampling jar. IPP are to exercise caution to ensure that the specimen does not become contaminated during this process.

NOTE: Do not use plastic or paper to transfer the specimen.

D. IPP are to randomly select the animal for sampling from those that have passed ante-mortem inspection and appear healthy. IPP are to collect the sample(s) at a point before the final carcass wash. To collect the sample, IPP are to:

1. Affix the bar coded-label to the glass sample jar.
2. Wash and sanitize hands and knife before collecting samples.
3. Don the gloves provided with the sampling supplies using aseptic technique.
4. Collect the sample for the assigned species:
 - a. Beef: Collect a 0.5 (one-half) pound sample of back fat. If the carcass selected does not contain 0.5 (one-half) pound of back fat, randomly select another carcass. Do not include mammary tissue. If liver is requested, collect a 0.5 (one-half) pound sample of liver from the same carcass from which the fat sample is collected.
 - b. Pork: Collect a 0.5 (one-half) pound sample of subcutaneous belly fat. Do not include mammary tissue.
 - c. Poultry: Collect enough abdominal (flap) fat from 3 (three) or more randomly

selected healthy-appearing birds from the same grower/farm for a 0.5 (one-half) pound sample.

5. Place the fat or liver sample in the jar and close the lid immediately. Be sure that the lid is tightly seated to the jar. Use the bubble wrap provided to protect the glass jar (wrapped around jar and fastened with rubber bands).
6. Place the closed glass sample jar containing the fat or liver sample in the freezer and freeze contents thoroughly for a minimum of 8 hours.

NOTE: The sample must be shipped frozen to the laboratory.

7. Maintain sample security during collection, freezing, and shipping.

VIII. HOW TO COMPLETE THE SAMPLING TASK AND SHIP THE SAMPLE

A. IPP are to follow the instruction provided in [FSIS Directive 13,000.2](#) for completing sampling tasks in PHIS and [FSIS Directive 7355.1](#) on the use of sample seals (FSIS Form 7355-2A/2B) to maintain sample security and identification.

B. IPP are to obtain all animal identification and traceback information from the establishment and enter it into PHIS when completing the sampling task. IPP are to record the name and address of the producer and all back tags, ear tags, brands, tattoos, and other forms of identification.

C. IPP are to ship the sample as follows:

1. Remove gel pack and shipping container from the freezer. Place the absorbent pad, cardboard separator, and gel pack in the shipping container (in the order described);
2. Remove the sample jar from the freezer. Ensure that the sample jar and printed form have a bar-coded label affixed. Do not remove the sample from freezer until the sample is ready to be packed and shipped;
3. Place the completed form in the plastic sleeve provided;
4. Test the jar lid to assure it is securely closed. Place bubble wrap around jar and secure with rubber bands. Place the wrapped jar and sample form in the 10"x 12" zipper lock and seal the zipper closure. Apply the bar-coded Sample Identification Label (FSIS Form 7355-2B) on the zipper lock bag;

NOTE: If an establishment is assigned paired fat and liver sample for the same cattle slaughter class (e.g., DIOX_HF_FL) during the same collection window, IPP are to use a single shipping container to ship both the fat and liver samples to the USDA ARS lab.

5. Place the jar upright on top of the frozen gel pack. Place the foam plug in the shipping container and press it down into the container as deeply as possible to secure the sample;
6. Complete and sign the FSIS Laboratory Sample Seal (FSIS Form 7355-2A) and apply to the shipping container, using the instructions provided in [FSIS Directive 7355.1](#); and
7. Ship overnight to ARS Biosciences Research Laboratory in Fargo, ND, using the FedEx Air bill provided. The shipping address for the laboratory is:

Sara Lupton
USDA-ARS-Biosciences Research Lab
1605 Albrecht Blvd
Fargo, ND 58102-2765
Phone: 701-239-1236

NOTE: Do not ship samples on a Friday or the day before a holiday.

IX. SAMPLE RESULTS REPORTING

Sample results for this project will not be posted in PHIS. Upon completion of the FY 2018 Dioxin Survey, FSIS will summarize and publish the survey results as an official report which will be accessible on the FSIS Web site. The report will present a summary of findings on a national basis. Individual plant results will not be published.

X. DATA ANALYSIS

ARS and FSIS will analyze the data collected in the nationwide FY 2018 Dioxin Survey to continue to monitor dioxin levels in animal fats and evaluate trends in dioxin levels in livestock and poultry. These data will be used to detect and identify possible sources of dioxin in the food supply and to determine whether regulatory actions by FDA and EPA are warranted.

XI. QUESTIONS

Refer questions regarding this notice to the Risk, Innovation and Management Staff by phone at 1-800-233-3935 or through [askFSIS](#). When submitting a question, use the Submit a Question tab, and enter the following information in the fields provided:

Subject Field: Enter **Notice 24-18**.
Question Field: Enter question with as much detail as possible.
Product Field: Select **General Inspection Policy** from the drop-down menu.
Category Field: Select **Sampling –General** from the drop-down menu.
Policy Arena: Select **Domestic (U.S.) Only** from the drop-down menu.

When all fields are complete, press **Continue** and at the next screen press **Finish Submitting Question**.

NOTE: Refer to [FSIS Directive 5620.1](#), *Using askFSIS*, for additional information on submitting questions.



Assistant Administrator
Office of Policy and Program Development

Attachment 1

Information for Establishments on the Fiscal Year (FY) 2018 Dioxin Survey

- The FY 2018 Dioxin Survey began in December 2017 as a Tier 2 project under the U.S. National Residue Program to gather information on dioxin levels in U.S. meat and poultry products. Fat and liver samples will be collected in federally inspected establishments and the survey data will be used to determine if dioxin levels in meat and poultry remain low and if further reduction is possible.
- This study will include steers, heifers, dairy cows, market hogs, young chickens, and young turkeys. Samples will be taken at the end of the production line, just prior to the final rinse. Back fat samples will be collected from steers and heifers; liver samples will be collected from some steers and heifers. Back fat and liver samples will be collected from dairy cows. Subcutaneous belly fat will be collected from market hogs. Fat from flaps will be collected from young chickens and young turkeys.
- IPP will collect and record all animal identification information in PHIS.
- Samples will be packaged and shipped to the Agricultural Research Service (ARS) laboratory in Fargo, ND, for analysis. Sample analysis by ARS will take about four to six weeks. In the event of a test result significantly different from background dioxin levels, FDA and EPA will seek additional information about the sample and about the animal from which that sample was taken.
- FSIS will not report laboratory results back to establishments on a sample-by-sample basis. Therefore, establishments are not required to hold product pending laboratory results for samples collected in this survey.
- In the event of a very high dioxin test result or an unusual finding, FSIS will conduct additional investigation and consider other actions to identify possible sources of dioxin coming into the food chain. If sources can be identified, FSIS will take steps to see that further dioxin inputs into the food supply are stopped. It is very unlikely that the Agency will recommend a recall based solely on a dioxin finding.
- ARS will report analytical findings to FSIS approximately four to six weeks after a sample is taken. FSIS will notify any establishment within approximately six weeks from the time that an initial sample is taken if there is any reason for additional investigation. If an establishment is not contacted by FSIS for additional information about the sampled animal, the establishment can assume that further investigation will not occur.
- The survey results will be presented in a publicly available final report summarizing the survey findings and characterizing the general dioxin levels in U.S. meat and poultry products. Individual establishments will not be identified and all participants will receive a copy of the final report.
- If you have questions about the survey please refer questions to the Risk, Innovation and Management Staff by phone at 1-800-233-3935 or through [askFSIS](#). When submitting a question, use the Submit a Question tab, and enter the following information in the fields provided:

Subject Field: Enter **Notice xx-xx, FY 2018 Dioxin Survey**
Question Field: Enter question with as much detail as possible.
Product Field: Select **General Inspection Policy** from the drop-down menu.
Category Field: Select **Sampling – General** from the drop-down menu.
Policy Arena: Select **Domestic (U.S.) Only** from the drop-down menu.

When all fields are complete, press the **Submit** button.