

New Meat Residue Testing Program - 2012

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On Friday, July 6, 2012, in the Federal Register, the USDA Food Safety Inspection Service (FSIS) announced new methods and sampling strategies for residue testing in meat, poultry and eggs and a restructuring of the National Residue Program that will become effective the first week of August. The Agency will be using the new methods to analyze more compounds than previously.

What are the different ways samples are taken? Samples from cattle, for example, are obtained in one of two ways. The first sampling method is the 'scheduled sampling' one where samples are more 'at random'. The scheduled sampling method is applied across each production class of animal and this year will include more samples per class (steers, beef cows, dairy cows, for example). The second sampling method is through inspector-generated samples whereby the public health veterinarian decides to sample animals they consider to be 'at-risk' for harboring a residue. Another level of sampling will also be implemented which will target testing at the herd or flock level. "For instance, producers may administer some veterinary drugs to a herd or a flock (for example, growth promotants or antibiotics given in the feed) in a way that involves misuse....Therefore, a targeted testing program designed for livestock or flocks originating from the same farm or region may be necessary on occasion to determine the level of a chemical or chemicals to which the livestock or the birds in the flock have been exposed."

What is the new testing methodology? The new method of testing tissue samples will include a multi-residue analytic screening method for many more compounds (read- drugs and other chemicals), and a faster turn-around time for results. The current testing method is being replaced because it only works for residues that inhibit microbial growth (certain antibiotics of certain classes), is not sensitive enough for sulfonamides and fluoroquinolones (like enrofloxacin) and too sensitive for tetracycline, does not distinguish among drugs of the same class, and may not identify multiple drug residues. The new method can screen for a variety of compounds, not just antibiotics, and can distinguish individual chemicals.

For what chemicals are they capable of testing?

Ampicillin	Beta-dexamethasone	Cefazolin
Chloramphenicol	Chlortetracycline	Cimaterol
Ciprofloxacin	Clindamycin	Cloxacillin
Danofloxacin	DCCD (marker for Ceftiofur)	Desthylene Ciprofloxacin
Dicloxacillin	Difloxacin	Enrofloxacin
Erythromycin A	Florfenicol	Flunixin

Gamithromycin	Lincomycin	Nafcillin
Norfloxacin	Oxacillin	Oxytetracycline
Penicillin G	Phenylbutazone	Pirlimycin
Prednisone	Ractopamine	Salbutamol
Sarafloxacin	Sulfachloropyridazine	Sulfadiazine
Sulfadimethoxine	Sulfadoxine	Sulfaethoxypyridazine
Sulamethazine	Sulfamethizole	Sulfamethoxazole
Sulfamethoxyipyridazine	Sulfanilamide	Sulfanitran
Sulfapyridine	Sulfaquinoxaline	Sulfathiazole
Tetracycline	Tilmicosin	Tylosin

What will this new testing scheme do to residue violation rates? The FSIS noted that “The nine classes to be sampled for CY 2012 under the new program are specified as Bob Veal, Beef Cows, Dairy Cows, Steers, Heifers, Market Swine, Sows, Young Chicken, and Young Turkey.” The agency expects to see a small increase in the number of violations they find.

What should livestock producers and veterinarians do with this information? This would be a great time to go to the farm medicine cabinet and look at the label for each drug that is being used for calves, older heifers, and cows (etc.) and ask the following questions:

1. What is the drug?
2. Who (what production class of animal) can it be used on according to the label? For example, does the label say “not to be used on dairy cattle over 20 months of age?”
3. What is the route of administration? Intramuscular (IM)? Intravenous (IV)?
4. What is the dosing rate?
5. What is the labeled withholding time for meat and/or milk?
6. Are we using the drug in any way that is NOT on the label? Do I have a prescription? Valid Veterinary Client Patient Relationship? New withholding times on the veterinarian’s label?
7. How do we identify treated animals and how do we keep records on our use of this drug?

Know that FSIS is able to look at many different drugs now and that no drug should be used that is not intended for food animals. Recognize that some drugs can be only be used on specific classes of animals (like a specific age group).

References

For the USDA Announcement: Federal Register / Vol. 77, No. 130 / Friday, July 6, 2012 / Rules and Regulations, Page 39895. <http://www.gpo.gov/fdsys/pkg/FR-2012-07-06/pdf/FR-2012-07-06.pdf>

For more information on drug residues:

http://extension.wsu.edu/vetextension/Documents/Spotlights/Residues_Oct2010.pdf

For an online course on “Farm-a-cology”: <http://extension.wsu.edu/vetextension/Pages/Courses.aspx>

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