FDA Sampling for Dairy Drug Residues on 1800 Farms

Drug residue sampling of 1800 dairy farms - “scaled down”

There has been a lot of attention over the last year or so regarding the FDA’s planned sampling of bulk tank milk from 1800 U.S. dairy farms for 32 different drugs, including antibiotics, anti-inflammatories, and anthelmintics. The plan was originally going to include traceable identification of the dairy farms and their owners. Exactly what kinds of follow up were to be done, or any possible penalties for detection of the compounds in bulk milk was not clear. The sample was to include 900 farms with “previous histories of drug residues in meat from cull cows” and 900 other farms without such history chosen randomly from around the country. (When first proposed, the second set of farms was not included, and correctly there was industry concern that the results would be biased toward finding more drugs in milk than would be found on the average across the dairy industry because only farms with cull cow residue history were to be tested.)

Now, however, in what is described in a story by Tom Quaife on DairyHerd Network from November 2011 as “a scaled down government effort”, the sampling is being described as a “survey”. The 1800 farm milk samples as described above will be collected, but the farm or origin will not be part of the results, or known to regulators. “No enforcement actions will be taken”, according to Deborah Cera, team leader for an FDA Drug Residue Compliance Team.

Many dairy producers who hear of programs like this mention that they have no problem with cleaning up violations and penalizing repeat offender farms. However, in this case the change is being welcomed by most members of the dairy industry. Sampling only violation-prone farms would almost certainly have resulted in negative publicity for the entire dairy industry regarding residue rates. The results of the modified survey should produce interesting information, especially regarding the percentage of tank samples detected with some of the de-worming drugs and antibiotics that are not commonly tested for. It will also give an indication of whether the industry as a whole may or may not have less likelihood of at least one drug in milk that is not supposed to be there in comparison with farms that have had more detection of drugs in meat of cull cows. The FDA has stated that sampling could begin during December 2011. I have been told informally that the number of farms sampled in Utah would be “4 or 5 farms”, which would indeed be proportional in terms of our fraction of U.S. dairy farms.

Is the EU Export 400,000/ml SCC Standard Really Coming After All? What Will it Mean During 2012?

EU export 400,000/ml SCC standard – USDA announces implementation during 2012

This is another subject that has attracted much attention over the last seven-plus years, with many stops and starts. Many of our previous newsletter articles have followed this story. The European Union (EU) imports a small but growing proportion of the milk produced in the U.S. However, the official list of “dairy plants” with EU health
certificates, sometimes called EU export certificates, is 44 pages long, in small print. Many of the names of EU export certified “milk plants” in Utah are names that myself and others in the dairy industry I have asked have never heard of before. They appear to include ice cream novelty stores, yogurt, pie, or cheese making businesses, etc., not places that would typically be thought of as a place that a dairy farm ships milk to such as DFA. The list also includes our major milk plants, those well known in Utah. It is apparent that most of the milk in the U.S. is shipped through facilities with EU health certificates, and those businesses want to keep their certificates.

The USDA Agricultural Marketing Service released a “Notice to the Industry” on November 22, 2011, regarding the European Union Health Certification Program. It is 32 pages long and can be found at http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRD3636640.

It states that the transition to new regulations regarding SCC and standard plate count (SPC) compliance with EU regulations begins on January 1, 2012, and that “After March 31, 2012, all shipments of dairy products requiring an EU health certificate must comply with the updated certification program.” It also says that the program has “a level of flexibility (derogation) for farms that exceed EU SCC or SPC requirements, but works toward compliance to ensure that U.S. dairy farmers are not negatively harmed.” There is a long list of dairy products affected, including butter, cheese, yogurt, ice cream, and dehydrated milk powders (interestingly, some things like milk chocolate and salad dressing containing milk are not affected.)

The consequences if a dairy plant cannot trace SCC or SPC records back to the dairy farms of origin of milk for export are that “the applicant shall be restricted from receiving future EU certificates”. At least one official SCC sample is required per month from each source farm, and SCC is calculated as the 3-month rolling geometric mean – at any given time this is [Month 1 SCC] x [Month 2 SCC] x [Month 3 SCC] and then the cube-root of that product is calculated.

In the example of SCC regulation shown in the notice document, if a particular farm has 3-month rolling mean SCC > 400,000/ml for 5 months in a row, that farm’s milk is “not OK for export” during the 5th month. The “milk supplier must suspend, segregate, discontinue certification or request derogation.” I was not familiar with the term “derogation”. This was explained later in the document, where 4 options for the milk supplier, which include suspending the pickup of milk from the farm, were explained. One option was:

“At the request of the farm, contact AMS Dairy Programs and ask for a derogation (deviation under special circumstances) to allow this milk to be accepted into the EU export program. A derogation will be granted provided that during processing the milk or milk products are (i) pasteurized or (ii) made into raw milk cheese that will be aged at least 60 days before being placed on the market. Corrective actions and out-of-compliance monitoring activities are expected to continue during the derogation period, which is valid for one year. In the event of a farm’s continued non-compliance, the derogation must be reapplied for one year following the issuance of the derogation.”

There is an additional explanation of a seasonal derogation. If a farm can demonstrate that for no more than 3 months per year, they have a seasonal pattern of SCC > 400,000/ml only during the same period each year, a “seasonal derogation will be granted”. (It does not say may be, it says will be.) Data in the U.S. has shown consistently for many years that farms are more likely to have SCC > 400,000/ml during summer months, especially during the month of August. I suspect that this seasonal derogation is intended to allow farms with high SCC only during summer months to be able to ship milk destined for products for EU export. This also allows the dairy plants using their milk to retain EU health certificates. Seasonal derogations last for 3 years before they must be renewed.

There is an administrative fee that the milk exporter is charged for each application for derogation. The dollar amount was not shown.

What will this mean for “dairy plants”?

To me this is one of the most intriguing questions surrounding the new standards. Will a pie company or a specialty ice cream maker really have records back to each farm where their milk for each batch of EU product came from? What if they cannot produce such records to the satisfaction of regulators? What if they cannot, but the direct milk
buying company that actually picks up milk from the farm can? How will administrative charges and responsibilities be sorted out?

If a dairy plant does indeed have records, what will they do when a particular farm has 3-month rolling mean SCC > 400,000/ml? Will field personnel from the primary milk buyer be in charge of whatever happens, or will a “dairy plant” such as a cheese making business that does not deal with producers be deciding?

What if a specialty ice cream maker or a pie company says suspend pickup and the primary milk buyer says no way, we aren’t sending separate tankers down the road, take it or leave it? Time will begin to sort these things out; these kinds of scenarios will indeed have to be dealt with.

What will this mean for dairy producers?

There are 4 options listed for dealing with any farm with a 3-month rolling mean SCC > 400,000/ml (as noted earlier, it has to be for 5 months in a row in order to make that farm’s milk “not OK for export”). Options are to suspend pickup, segregate (divert) milk from those farms, discontinue certifying, or ask for derogation. I suspect that at first most dairy plants will not suspend pickup or divert milk supply for farms whose SCC is higher than 400,000/ml enough times to become “not OK”. They will probably apply for derogation, including seasonal derogation if applicable, probably during summer months, and such status lasts for 3 years per farm. My experience with over 130 milk buying companies over the years suggests that suspending pickup may be the course of action for the very smallest herds or the most personally difficult producers to deal with, but probably not the preferred course for dealing with most farms. Milk buyers usually want all the milk they can get, even when milk is relatively plentiful and the price/cwt is low. However, derogation is apparently not possible for products made with unpasteurized milk except for raw milk cheese aged at least 60 days.

Thus, it seems that these new regulations do not really mean that the “new legal limit” of SCC in bulk milk is 400,000/ml for the U.S. However, as time passes, it is likely that farms with enough elevated SCC tests to become “not OK for export” will become more and more uncommon and inconvenient to their milk buyer. Dairy plants may come to see that whenever they make a batch of product, usually on very short notice, for export to the EU, it is a great irritation to see that one farm out of all of the source farms for the milk they want to use is “not OK”. If it happens on any regular basis, they may suspend pickup or tell the producer to seek another milk buyer, even if that means waiting until a current contract expires.

Somatic cell counts have decreased drastically and rapidly the last several times that the SCC legal limit was decreased. In my former position in NY I experienced a lot of chaos in 1993 when the new limits resulted in many excluded dairy farms scrambling to reduce SCC. This new change will hopefully not result in the same consternation, but it does mean that the new “target” level of SCC to be likely to remain in compliance will be less than 300,000/ml. One may hear the opinion that this target is now “readily reachable” by “any good farm” or something like that, but that is contradicted by nationwide U.S. SCC data, including the latest data. This will mean a new effort to more consistently control SCC on many dairy farms.

What will this mean for dairy veterinarians?

I was recently at a meeting with many mastitis researchers and extension people from around the U.S. and this subject came up. It seems that increasingly many dairy producers have begun to get their mastitis and udder health information from other sources besides the primary herd health veterinarian. Milking equipment and drug company personnel, web sites, Facebook and YouTube, industry advertising, consultants, other professions visiting the farm, and other sources may be influencing decisions regarding mastitis control practices, type and changing interval of inflations, milking methods such as whether or not to use cloth towels, paper towels or any towels, or disposable gloves. Choices of teat dip, method of applying dip, dry cow treatment, whether to use selective or blanket dry cow treatment, whether or not to use J5 vaccination, and lactating cow antibiotics or other treatments for clinical mastitis may not always be primarily guided by the practicing veterinarian.
I hope and expect that renewed emphasis, and I think there will be such emphasis, on more consistent reduction of SCC will result in more attention to mastitis and udder health practices on many farms. This may not mean that they need to begin teat dipping, paying attention to environmental sanitation, etc., but it will likely mean that many specific mastitis control decisions and choices such as those listed above will get renewed attention. Practicing veterinarians should certainly be part of such decisions. No other farm advisors are more familiar with the health of the dairy herd or better trained to help in udder health decisions than the herd health veterinarian.

Please use the link shown earlier to read about the Notice to the Industry and let me know what you think it will mean. Have a good holiday season and a great year in 2012.

Please let us know your comments and also suggestions for future topics. I can be reached at (435) 760-3731 (Cell), (435) 797-1899 M-W, (435) 797-7120 Th-F or David.Wilson@usu.edu.

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