Michigan

Department of
AGRICULTURE
& Rural Development

Michigan Department of Agriculture & Rural Development

Residue Control and Educational Program

In association with the
Michigan Dairy Industry

Food and Dairy Division
P. O. Box 30017
Lansing, MI 48909
517-373-1060
www.michigan.gov/mda

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Introduction

The Michigan Department of Agriculture & Rural Development (MDARD) and the Michigan Dairy Industry would like to thank you for taking a step towards better farm and drug residue management on your farm. The good management practices and drug residue prevention guidelines in this manual are designed to assist you in producing a quality and safe dairy product. Please take the time to go through the manual with your veterinarian, field representative, or state inspector and discuss the items as they pertain to your operation. Check off the topic boxes as you go through the manual. Recommendations can be written in the columns or at the end of each section. Please complete the certificates at the end of the manual.

Additional educational materials are available for posting in the milkhouse and employee training.

Copies of this manual can be obtained through your local veterinarian, field representative, or MDARD inspector. The manual is also available on the MDARD Website at: **www.michigan.gov/mda-dairy.**

Healthy Herd Management and Mastitis Prevention

Nutrition:

☐ Cattle have access to a fresh balanced ration and roughage daily. My farm nutritionist is _____.

☐ Clean fresh water is available to all cattle at all times.

☐ Medicated feeds are used properly according to veterinarian recommendations and label restrictions.

☐ On-farm steps are taken to prevent violative drug residues from occurring due to medicated feed or other feeds purchased.

Reproduction:

☐ A separate, clean, and sanitized calving area is provided.

☐ All uterine and vaginal infections are treated according to veterinarian recommendations and milk discarded to prevent violative drug residues.

☐ Cows culled for reproductive problems are tested and cleared of drug residues prior to sale.

Vaccines and Parasite Control:

☐ All cattle are vaccinated according to veterinarian protocol. On-farm protocol in place.

☐ Parasite control used-as needed-on the advice of the veterinarian.

☐ Approved dairy insecticides and sprays used according to Environmental Protection Agency (EPA) label.

☐ Vaccines, antibiotics, and insecticides stored properly to prevent contamination of milk or milk contact surfaces.

☐ Equipment used to administer treatment (needles, syringes, balling guns, etc.) is properly stored to prevent contamination of milk or milk contact surfaces.

☐ Needles and empty containers are properly discarded.

Cattle Housing:

☐ Adequate cattle housing is provided for all groups (calves, heifers, dry cows, and milk cows).

☐ Proper ventilation is provided to prevent respiratory diseases.

☐ Stalls and pens are maintained with fresh, clean bedding.

☐ Alleys are scraped daily or more frequently, as needed.

☐ Manure is stored so it is not accessible to cattle.

Biosecurity:

☐ All new animals are isolated from other animals as advised by your veterinarian.

☐ Animals are vaccinated according to the vaccination protocol set by your veterinarian.

☐ New cows are segregated until cultured for contagious mastitis pathogens.

☐ Rodent and wildlife control is in place to keep rodents and wildlife out of cattle housing and feeding areas.

☐ Clean boots and coveralls are worn by employees. Boot-wash, brushes, and disinfectant are located at entry point to farm and cattle areas.

☐ Feed and feed additives do not contain ruminant by-products to prevent bovine spongiform encephalopathy (BSE).

☐ Dead cattle are disposed of properly through rendering or proper burial according to Act 239.

Mastitis Management Program:

☐ Cows are kept clean and dry.

☐ Udders are singed or clipped to remove hair.

☐ Milking equipment is checked annually. Vacuum controller is checked and cleaned monthly.

☐ An approved milking procedure is used which results in milking clean, sanitized, and dry teats and teat ends. Use one or more paper or cloth towels per cow. Never use a paper or cloth towel on more than one cow.

☐ Each teat is pre-stripped to check for abnormal milk prior to putting the milking unit on the cow. Abnormal milk is withheld from the bulk tank.

☐ Steps are taken to prevent over-milking, liner slips, and squawks.

☐ All cows and all teats are post dipped with a dip cup. Only an approved and effective post dip product is used.

☐ My farm goal is to keep my bulk tank somatic cell count (SCC) at less than _____ cells/mL.

When I exceed the farm goal:

☐ I work with my veterinarian, milk plant field representative, and milking equipment specialist to determine the cause.

☐ Cows are tested with a California Mastitis Test (CMT), DHIA, or SCC test and cultured to identify mastitis causing organisms.

☐ Decisions to treat clinical or sub-clinical mastitis are based on culture results and according to a treatment protocol set by my veterinarian.

☐ Infected cows milked with a separate unit that is washed and sanitized before reuse or segregated and milked last before treated cows.

☐ Treated cows are identified, separated, and milked last or with a separate abnormal milking unit (bucket, lid, claw, and vacuum from vacuum line).

☐ All cows are dry treated at “dry-off,” identified, and separated from the milking herd.

Recommendations for improving dairy herd health and mastitis management:

Dairy Farm Drug Residue Prevention

Establish a Valid Veterinarian/Client/Patient Relationship (VCPR):

☐ A veterinarian has assumed responsibility for making medical decisions and administering treatment to my animals.

☐ A veterinarian knows the care and practices I use on my farm and is capable of making preliminary diagnoses.

☐ A veterinarian is readily available and can provide emergency care for my animals.

☐ A veterinarian and I have established drug treatment protocols using approved Over-the-Counter, prescription, or properly “extra-labeled” drugs.

Use Only FDA Approved Over-The-Counter, Prescription, or Extra-Labeled Drugs:

☐ All drugs are approved Over-the-Counter, prescription, or extra-labeled use.

☐ Prescription drugs and extra-labeled drugs have proper labeling with veterinarian's name and address, animal ID, condition treated, active ingredient, dosage, route of administration, number of treatments, cautionary statements, and withhold times for milk and meat.

☐ Lactating and non-lactating drugs are stored separately.

☐ Drugs and drug administering equipment is stored to prevent contamination of milk and milk contact surfaces.

Caution: Instructions from the veterinarian to check milk or meat prior to sale does not eliminate the need for withholding times on the label.

The following drugs are **prohibited** for use in **lactating dairy cattle**:

- Sulfonamide drugs (except approved use of Sulfadimethoxine, Sulfabromomethazine, and Sulfaethoxypyridazine).
- Sulfadimethoxine Sustained Release (SR).
- Tetracycline drugs (Chlortetracycline, Oxytetracycline, Tetracycline) used as feed additives.
- Phenylbutazone (in female dairy cattle 20 months of age or older)

The following drugs are **prohibited** from use in any species of **food-producing animal:**

- Chloramphenicol
- Clenbuterol
- Diethylstilbestrol (DES)
- Dimetridazole
- Ipronidazole (e.g., Ipropan)
- Tetracycline in all feeds for lactating dairy cows.
- Other nitroimidazoles (e.g., Flagyl)
- Furazolidone (e.g., Furox)
- Nitrofurazone (e.g., NFZ)
- Fluoroquinolones such as Faraflox, Baytril, Orbox (except for approved use)
- Glycopeptides
- Colloidal Silver
- Dipyrone
- DMSO (Dimethylsulfoxide)

Administer All Drugs Properly and Identify All Treated Animals:

☐ Identify individual(s) on farm who will treat animals. They are:

_____.

☐ Use drug treatment protocols established by your veterinarian.

☐ Follow labeled instructions as provided on container or provided by your veterinarian.

☐ Treat animals based on age, weight, and body condition.

☐ Avoid giving intramuscular injections and avoid areas used in prime cuts.

☐ Identify treated animals with more than one form of identification. List methods of ID here:

_____.

☐ Record treatment information immediately in treatment log.

☐ Separate treated animal from lactating animals if possible.

☐ Follow withholding times prescribed by manufacturer or veterinarian.

☐ Milk treated animals last or with separate equipment (bucket, lid, claw, and vacuum from vacuum line).

☐ Separate cows “dry treated” immediately after treatment.

☐ Test animal’s milk and meat with an approved test prior to offering milk or meat for sale.

☐ Do not feed antibiotic waste milk to calves intended for sale.

Records and Record Keeping:

☐ I keep written or computer records on all animals.

☐ I keep written or computer records of all animals **treated.**

☐ I use records to determine on farm problems and review them with my veterinarian to make the needed corrections.

☐ I show family and employees how to read, keep, and update records.

☐ Treatment records contain data to include: treatment date, animal ID, drug used, dosage, route of administration, withhold times for meat and milk, and who treated the animal.

☐ I keep records for the past 18 months for review.

Note: Records must be kept for 12 months if the farm has had a positive drug residue test.

On-Farm Drug Screening:

☐ Use an approved drug test for the drugs used to treat cows.

☐ Provide a suitable place to perform testing according to test directions.

☐ Use positive and negative controls to assure the test is working properly.

☐ Be sure all people using the test are trained to perform the test. Keep records of people trained.

☐ Never shorten the milk or meat withhold times.

☐ Test all dry cows prior to putting milk in the tank.

☐ Test newly purchased animals before milking them into the bulk tank.

☐ Test individual cows who received multiple treatments or two or more drugs.

☐ Sample cows and bulk tank according to standardized sampling procedures.

Employee/Family Awareness to Prevent Drug Residues:

☐ Employees approved to treat animals are also able to make decisions on selling animals.

☐ My family and/or employees understand the cost of selling milk with violative drug residues.

☐ I have a written protocol for milking treated animals posted in the milkhouse.

☐ All treated cows are milked last or in separate equipment.

☐ Phone numbers of farm management, veterinarian, and field representative are posted for family or employees to call for assistance.

☐ My milk company will pay for quality or antibiotic dumps and family/employees are encouraged to contact field representative if they suspect contamination of the milk. My field representative is _____.

☐ I have incentive pay plans for quality milk produced and penalties if poor or violative milk is shipped.

☐ I provide family/employees proper training to prevent milk quality or drug residues from occurring.

Recommendations to Improve Drug Residue Prevention Protocol

MDARD and the Michigan Dairy Industry would like to thank you for completing this program. Please take time to complete the program certificate with your veterinarian, field representative, and inspector. Please keep a copy for your records. For additional information, please contact:

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Additional educational materials are available. Please contact your veterinarian, field representative, extension agent, or MDARD inspector for additional materials.

Michigan Residue Control & Educational Program

Certificate of Completion

Permit Number_____ **New Producer:** ☐ Yes ☐ No **Drug Residue:** ☐ Yes ☐ No

Farm or Producer Name_____

Dairy Producer:

I have reviewed the Michigan Residue Control and Education Program with _____, D.V.M. / Field Representative/ Inspector. I agree to implement proper management practices to avoid violative drug residues from the milk or beef produced on my farm. I understand that I am responsible for drug residues that occur in my milk or beef. I will take steps to assure all family members or employees have been trained to prevent drug residues. I will not sell any milk or meat suspected of containing drug residues unless properly tested and is found to be clear of drug residues

_____ _____

Producer's Signature Date

Veterinarian/ Field Representative/ Inspector:

I have reviewed the Michigan Residue Control and Education Program with _____. The dairy producer acknowledges that he/she understands the management and drug residue prevention practices discussed. The producer has agreed to make the needed changes to meet these practices.

_____ _____

Veterinarian's Signature Date

_____ _____

Inspector's Signature Date

_____ _____

Field Person's Signature Date

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