

Current as of 12/09.

Guide will be updated on a periodic basis, as needed. Check the website for the most recent version.

Unpasteurized (Raw) Milk Sellers' Guide 2009

Produced by Rural Vermont
www.ruralvermont.org / 802-223-7222



For the past several years, Rural Vermont has been working with a group of farmers to enact raw milk legislation that would expand opportunities for the buying and selling of raw milk in Vermont. On June 8, 2009, the Unpasteurized (Raw) Milk bill was signed into law. This landmark legislation adopts and recognizes tiered regulation as an appropriate and reasonable approach to ensuring a safe, clean product, while giving farms of all sizes the opportunity to take advantage of the growing consumer demand for raw milk. The new law - Act 62 - went into effect July 1, 2009. It creates a two-tiered system for raw milk sellers - allowing up to 40 gallons of milk to be sold per day, and allowing delivery to customers' homes. The details of the law are explained in this booklet.

The Tiers - Tier 1 and Tier 2

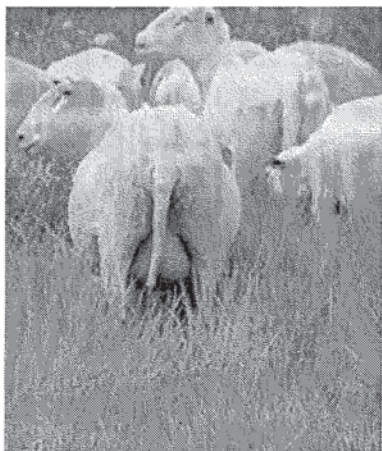
◆ Tier 1 Raw Milk Sellers can sell up to 50 quarts of raw milk per day from the farm where the milk is produced.

◆ Tier 2 Raw Milk Sellers can sell up to 40 gallons of raw milk per day from the farm where the milk is produced.

◆ Tier 2 Raw Milk Sellers are also allowed to deliver raw milk to a customer at the customer's home, if the milk is pre-purchased. Tier 2 sellers can only sell a total of 40 gallons per day - including both farm sales and deliveries.

◆ A farmer selling 50 or fewer quarts of milk per day may deliver if s/he meets the standards for Tier 2.

◆ Farmers selling in Tier 2 must meet all of the Tier 1 requirements, plus the additional Tier 2 requirements.



Standards for All Raw Milk Sellers

- All raw milk must be sold directly from the farmer to the end user (customer). Raw milk cannot be sold to anyone for resale.
- All raw milk must be sold from the farm. If the farmer has met the Tier 2 requirements, the milk may be delivered to customers' homes. Milk cannot be offered for sale at any other location.
- Free samples of milk can only be offered at the farm.
- Prior to milking, the animal's udders and teats must be cleaned and sanitized.**(see below)
- Animals must be housed in a clean, dry environment. Pasture is ok.
- All milking must happen in a clean environment and a place that can be kept clean.
- TB/Brucellosis Testing
- Rabies Vaccination
- Water Testing
- Antibiotic Testing
- Sanitizing Equipment
- Customer Contact List
- Transaction Records
- Customer Tours
- Cooling
- Frozen Milk Samples
- Labeling Raw Milk
- Farm Sign
- Bottling

Tier 2 Only

- Registering with the Agency of Ag
- Inspection by the Agency of Ag
- Reporting of Sales
- Milk Testing
- Delivery Requirements

**Sanitizing udders - Before milking, all brushing must be finished. The udders and teats should be free from visible dirt, and should be thoroughly cleaned (not dry wiped) and dried (manually wiped dry). Or, you can also treat the udder and teats with a sanitizing solution and dry just prior to milking. Wet hand milking is not allowed.



More details inside...

TB & Brucellosis Tests

- TB and Brucellosis tests need to be done by your vet.
- Testing must be done prior to selling any milk.
- All dairy animals in the herd must be tested. Segregating a herd and testing only those animals dedicated to raw milk production is not permitted.
- The results of the TB/Brucellosis tests must be posted "in a prominent place" that is "easily visible to customers."
- In order to get the TB/Brucellosis test, your animals will need to be identified. Your vet can give you a VT state ear tag. This tag is not a NAIS tag. You can ask your vet how s/he keeps records. The tag should be associated only with the TB/Brucellosis test.
- You can also use a tattoo, and your vet can do the tattoo, or you can do it yourself and make up your own number. Tattoo kits can be purchased for \$40-60. Or better yet, the North Country Farming Network lends them to members (membership = \$12/year).

- Again, vaccinations must be done prior to selling any milk.
- Again, all of the animals in the herd must be vaccinated.
- And again, vaccination verification must be posted.
- ◆ It's up to your vet how often to vaccinate.

Why do we need the TB/Brucellosis Tests and the Rabies vaccine?

Basically, the answer is that the legislators were concerned about the possibility of these diseases passing through raw milk, and so decided to require the testing and vaccination.

A note on costs: There seems to be a range of what vets charge in Vermont for the tests and vaccines. You might want to shop around. The average seems to be \$4 for a farmer-administered rabies vaccine and \$60-100 for the TB and Brucellosis tests (combined total). The bulk of the cost is the vet visit, so try to schedule the tests when your vet is already coming to your farm to save some money.

Water Testing

- Testing for potable water is required by federal law for anyone who sells any kind of food to the public. This language was added to the law so that raw milk producers would be aware of this requirement.
- You must test your water every 3 years, or if you do work on your water system.
- The Association of Conservation Districts offers free water testing to farms with at least one animal. To make arrangements, contact your local Conservation District:
http://www.vacd.org/conservation_districts.html
- Or you can buy a water testing kit from the Vermont Dept of Health Lab by calling 802-863-7335. Order "Kit A" to satisfy the requirement. It costs \$14 and you must prepay (you can use a credit card over the phone). You will get a sample bottle and instructions for taking the sample and getting it to the lab in Burlington within 30 hours (can either be dropped off or mailed USPS).
- ◆ There are other labs that do water testing too - there is a list on the Dept of Health's website:
http://healthvermont.gov/enviro/ph_lab/documents/certified_labs.pdf.
- ◆ Your water might test poorly (about 30% of the tests will have high bacteria counts). If this happens, you can "shock" your system.**
- ◆ Some high counts in milk can be the result of bacteria in the water. Water is not an ideal medium for the growth of certain bacteria, but milk is. So, it can result in high counts for your milk if there are small amounts in your water.

Tattoo Kit Sources

To Buy:

http://www.ohiovalleyshowsupply.com/cow_calf.html

<http://hambydairysupply.com/xcart/product.php?productid=1816>

This one can use letters:

http://www.jefferslivestock.com/ssc/product.asp?CID=2&pf_id=0030138

To Borrow:

<http://www.northcountryfarmingnetwork.org>

ear tattoo



Rabies

- Rabies vaccines can be given by the vet or by the producer, if the vet will certify that it has been done – check with your vet to see if s/he will.

****Information about shocking a well system** can be found at the following websites:

<http://www.solutions.ca/water-systems/Resources/Superchlorinationor%60Shocking'theSystem.pdf>

<http://www.hipspro.com/pubs/Well%20Shocking%20Procedure.pdf>

After you shock your system, you will have to test it again to make sure it passes.

Antibiotic Testing

- ◆ You are required to test your milk for antibiotics ONLY if the animal has been treated with antibiotics.
- If you do treat an animal with antibiotics, the milk must be tested and clear of antibiotic residue before you sell it.
- ◆ Antibiotics in milk is a serious allergy issue! Antibiotics can be found in milk even after the recommended wait time, so be sure you do this test.
- ◆ FDA approved test kits must be used, and include Charm BSDA, Charm II Competitive, Charm II Cloxacillin, Delvotest, IDEXX Snap, and LacTrek.
- ◆ Any lab that does milk testing can also provide antibiotic testing. This is probably the least expensive and most hassle-free option. See a list on page 6.

Sanitizing Equipment

- The law says that milking equipment must be of sanitary construction, cleaned after milking, and sanitized prior to milking.**

****Sanitizing** can be achieved by complete immersion in hot water at a temperature of at least 77°C (170°F) for at least five (5) minutes; or exposure to a flow of hot water at a temperature of at least 77°C (170°F), as determined by the use of a suitable accurate thermometer, at the outlet, for at least five (5) minutes. Certain chemical compounds are also effective. These are contained in 21 CFR 178.1010. You can use Clorox - instructions are here: <http://cloroxprofessional.com/pdf/servicebulletin.pdf>

Customer Contact List

- All farmers selling raw milk must maintain a current list of all customers purchasing milk, including their contact information.
- It might also be useful to record on the contact sheet when the customer has toured the farm.
- ◆ A contact list template can be downloaded at <http://www.ruralvermont.org/issues/milk/2009/contactlisttemplate.pdf>

Transaction Records

- All farmers selling raw milk must maintain a list of all raw milk sales, and keep it on file for at least one year.
- This list must include the customer's name, date of purchase, and amount purchased.
- ◆ You can use a simple notebook for this record, or a file with daily sheets. You can find a template on Rural Vermont's website: <http://www.ruralvermont.org/issues/milk/2009/transactionrecordsample.pdf>
- Farmers selling in Tier 2 must report yearly to the Agency of Agriculture the total amount of milk sold, so it's a good idea to total each page to make the reporting easier.

Customer Tours

- The law requires the farmer provide all customers a tour of "the farm and any area associated with the milking operation" before they buy milk, and that customers can reinspect the farm at reasonable times.
- Keep track of who has had a tour on your customer contact sheets (we recommend the customer sign that they have received a tour with the date).
- ◆ You can offer certain days throughout the year when prospective customers can have a tour all at the same time, so it is more convenient.

Sign up for Rural Vermont's Annual Raw Milk Open Farm Day to draw new customers and take care of your farm tours! If interested, contact Shelby at (802)223-7222 or shelby@ruralvermont.org

Cooling the Milk

- The requirement in the law is that you cool your milk to no more than 40° within 2 hours of finishing milking and keep it that cool until the customer receives it.
- ◆ Putting milk in the refrigerator right after milking will NOT accomplish this.
- Because every system works a little differently, be sure to initially test your chosen method by monitoring the temperature of your milk over the course of the two hours.
- If your system does not have an agitator or stirring mechanism, be sure to shake your bottles a few times during the cooling process to ensure that the milk is being cooled evenly. Some of the methods that have worked for farmers:
 - ◆ Bulk tanks (note that the PMO requires milk to be cooled to 45 degrees, so if you're shipping milk, you may need to adjust the temp of your bulk tank)
 - ◆ Ice water baths
 - ◆ Packing in snow
 - ◆ Placing in freezer for shorter period of time (keep a close eye!)
 - ◆ Can coolers, two options: (1) place stainless steel milk cans into chest freezer that's been converted to a refrigerator and filled with cold water; (2) place cans into well-insulated cooler and fill with ice

Frozen Samples

- The law requires that all farmers selling raw milk keep the past 14 consecutive days' worth of samples frozen at the farm. Make sure that each sample is labeled clearly with the date.
- Each sample must be a composite sample from the day.

You must use sterile containers to keep your samples. One option is WhirlPak bags. You can get 500 WhirlPak bags for about \$45 at www.enasco.com/whirlpak/WhirlPak%26%23174%3B+Bags/Write-On+Bags/ 3



Labeling Raw Milk

All raw milk that is sold direct to customers must be labeled. The label must be displayed on the container's principal display panel (either on the side or top), be clearly readable, and include the following information:

- The date the milk was obtained from the animal
- The name, address, zip code, and telephone number of the producer
- The common name of the type of animal producing the milk (e.g. cow, goat, sheep) or an image of the animal
- The words "Unpasteurized (Raw) Milk. Not pasteurized. Keep Refrigerated." This text must be at least one-eighth inch in height. (This can be accomplished using Times New Roman font, size 14.)
- The words "This product has not been pasteurized and therefore may contain harmful bacteria that can cause illness particularly in children, the elderly, and persons with weakened immune systems and in pregnant women can cause illness, miscarriage or fetal death, or death of a newborn." This text must be at least one-sixteenth inch in height. (This can be accomplished using Times New Roman font, size 6.)

Labels must be attached to bottles, but do not need to be glued. This flexibility allows for a few different options.

- ◆ Rubber band laminated labels to container
- ◆ Tuck paper labels into nametag holders, and tie around neck of container
- ◆ Adhere standard sticker labels to disposable lids, and throw away after each use
- ◆ Adhere standard sticker labels to containers (most appropriate for one-time use containers)
- ◆ Print labels directly onto glass jars, and use lid stickers for dates

Special Note for Tier 1

- Tier 1 farmers are not required to fill the bottles themselves, which means that if customers are bringing their own containers and serving themselves, then there should be a stack of pre-printed labels in the milkroom for them to adhere to their containers.
- To be sure that customers know to do this, hang a simple sign, next to the stack of labels, in a conspicuous place.
- Note: You can leave the 'date milked' section blank on the labels, and request that customers write in the date they buy the milk. Have pens available too!

** Packages of 600 labels can be purchased for less than \$20 at www.worldlabel.com or at your local office supply store. More label samples available at: <http://www.ruralvermont.org/issues/milk/2009/labeltemplate.pdf>

The words on this sample label are the size you need.

Farm Sign

- There must be a sign that is clearly visible to your customers with lettering at least one inch in height with "Unpasteurized (Raw) Milk" and the same warning words as the label.
- ◆ Rural Vermont has signs available for any farmers who want them. The signs are \$5 for one and will be printed on corrugated plastic. The Agency of Agriculture has approved these signs, so you will know you are legal if you use one. To order one, call (802) 223-7222.



Thank You to the Vermont Pasture Network for helping with the cost of printing this booklet!



Date milked: _____

**Rural Vermont Farm
15 Barre St., Suite 2
Montpelier, VT 05602
(802) 223-7222**

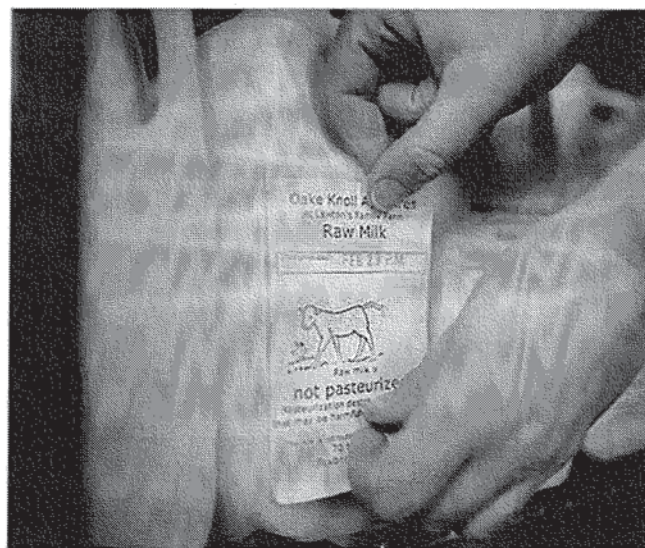
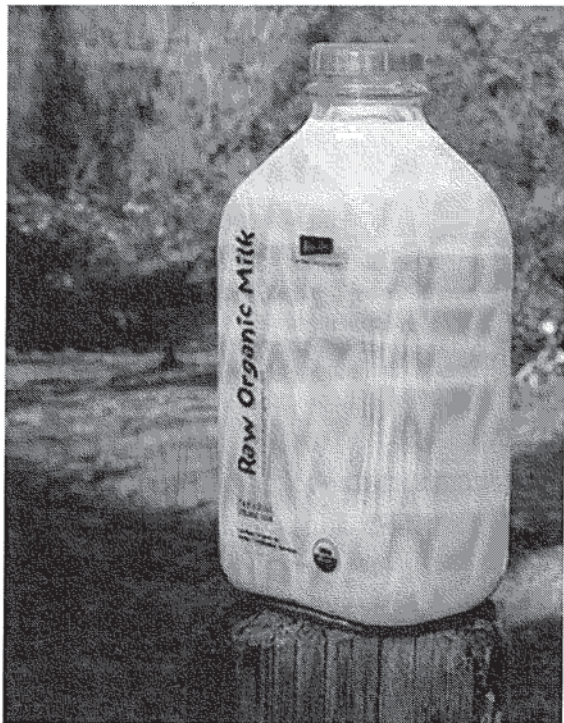
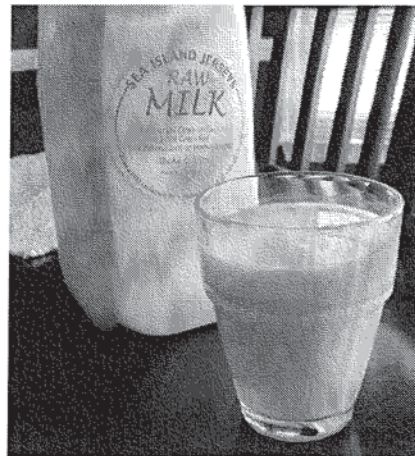
Cow milk

**Unpasteurized (Raw) Milk.
Not pasteurized.
Keep Refrigerated.**

This product has not been pasteurized and therefore may contain harmful bacteria that can cause illness particularly in children, the elderly, and persons with weakened immune systems and in pregnant women can cause illness, miscarriage or fetal death, or death of a newborn.

Bottling Raw Milk

- ❑ Tier 1 farmers may allow customers to fill their own bottles. If you do this, make sure customers know how to properly clean their bottles and that they should adhere the preprinted labels to their containers.
- ❑ Tier 2 farmers must fill bottles for the customer.
- ❑ Tier 2 farmers are supposed to clean the bottles, but you can set up a system where customers clean their own bottles if they only get their own bottles, and their name and address is on each bottle.
- ◆ **Remember:** if the bottle is not clean, it is your fault. The law specifically states this and puts the liability for a dirty container on the farmer.



Tier 2 Raw Milk Requirements

Any farmer can choose to operate in Tier 2, even if s/he is selling 50 or fewer quarts of milk/day. So, if you want to deliver milk, you can meet the Tier 2 requirements, and then you are allowed to deliver. You might also want to meet the Tier 2 requirements if you are getting close to the 50 quart limit, so you can go over without any worries. Farmers selling milk in Tier 2 or delivering milk must meet all the requirements listed up until this point, **and** those listed here in the Tier 2 section.

Registration with the Agency of Agriculture and Inspection

All Tier 2 raw milk sellers must register with the Vermont Agency of Agriculture before they can sell in Tier 2.

To Register and Set Up your First Inspection, contact:

Dan Scruton, Dairy & Energy Chief
Vermont Agency of Agriculture
802-828-2433
dan.scruton@state.vt.us
116 State Street
Montpelier, VT 05620-2901

◆ For your first inspection, the Agency will likely make an appointment so that you can show them where all of your records, etc., are kept.

◆ Future inspections will take place unannounced on an annual basis. The Agency inspector will use a checklist to see if you are complying with all of the requirements of the law. You can view the inspection checklist at: [http://www.vermontagriculture.com/fscp/dairy/documents/](http://www.vermontagriculture.com/fscp/dairy/documents/Sample_Tier_Two_Farm_Inspection_Form.pdf)

[Sample_Tier_Two_Farm_Inspection_Form.pdf](#)

◆ After your inspection, you will get a letter from the Agency that says you have met the requirements and are registered.

You should keep this letter on file.

Annual Sales Reporting

Each year by March 1st, you need to report to the Agency the total number of gallons of milk you have sold in the past 12 months. Because the law only went into effect on July 1, 2009, the Agency is not requiring the first report until March 1, 2011. However, you must report on the full 12 months prior to March 1, 2011. You can email or mail your report to Dan Scruton (contact info to the left).

It can be as simple as this:
Between March 1, 2010 and March 1, 2011, (name of farmer and farm) sold (total # of gallons) gallons of unpasteurized (raw) milk.

The reporting should be easy for you because you have to keep a daily transaction record. If you total each page, and then every month as you go, it should only take a few minutes to figure out your total sales for the year.

Milk Testing Laboratories

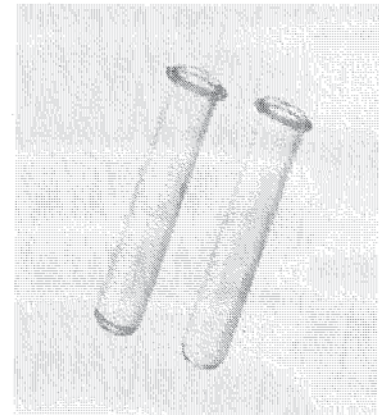
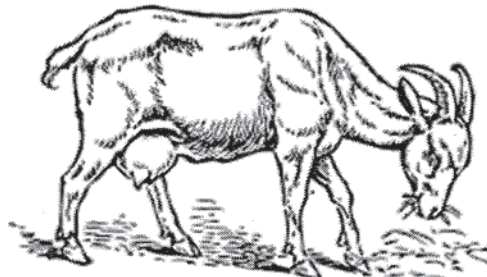
Vermont Agency of Agriculture Food & Markets Laboratory

103 S Main St
Waterbury, VT 05671-9800
(802) 244-4510
<http://www.vermontagriculture.com/ARMES/lab/LabDairy.html>

Dairy Bacterial Testing, LLC

802-259-9229
www.dairybacterialtesting.com
(working towards FDA accreditation)

Currently, the only in-state accredited lab is the Vermont Agency of Ag, Food & Markets Lab in Waterbury. Dairy Bacterial Testing, an independent lab, is working towards accreditation. Additionally, there are several out-of-state accredited labs that could satisfy the milk testing requirement.



Raw Milk Testing

- For Tier 2 farmers, the law states that milk must be tested twice per month in an FDA accredited lab and must meet the standards listed to the right.
- The farmer must arrange to have the test results sent to the Agency of Agriculture every time the milk is tested (if you are testing more often than twice per month, you only have to send the results twice per month). The lab will do this if the farmer requests it, but the farmer must ensure that it is happening, so check up the first few times. Alternatively, the farmer can send the results to the Agency within 5 days of receiving the results.
- Each lab will have requirements about specific methodology and handling. You'll need to check with the lab you choose to use about their requirements and follow their instructions.
- ◆ To get a document outlining the protocol adopted by the Agency of Agriculture for using the state lab, contact Romeo Cyr at (802) 244-4510 x13 or romeo.cyr@state.vt.us. The requirements include:
 - Milk samples be provided to the lab in final "packaged" form, meaning the exact way in which the milk is presented to the customer.
 - Two containers must be provided. The first for temperature only, and the second will be tested.
 - If you only sell milk in half-gallon containers, you will need to provide the lab with 2 half-gallons of milk.
 - The samples be hand-delivered to the lab, but you can arrange for someone else to deliver them. Be sure to label your containers if you want them back.

- Even though the Agency is receiving copies of your test results, you must keep your test results on file for one year, and they must be prominently displayed where your customers have access to them.
- If you ship milk, the Agency will accept test results from milk tested by the co-op, but you must make sure you are getting the additional coliform test done and also that you are meeting the more stringent raw milk standards. Also, make sure the Agency gets the results.

The standards are as follows:

- Total bacterial (aerobic) count: 15,000 cfu/ml (cattle and goats)
- Total coliform count: 10 cfu/ml (cattle and goats)
- Somatic cell count: 225,000/ml (cattle); 500,000/ml (goats)

What if my milk tests are high?

- ◆ The Agency of Agriculture has a "2 out of 4" / "3 out of 5" policy currently for farmers shipping milk. They will apply the same policy to raw milk sellers.
- ◆ This means that if you get 2 high results out of the last 4, including the most recent, you will receive a warning letter.
- ◆ If you get 3 high results out of the last 5, including the most recent, you will not be allowed to sell raw milk under Tier 2 (you can still sell under Tier 1 until your results are within the Tier 2 limits).
- ◆ You will need to contact Dan Scruton to ensure you are once again allowed to sell under Tier 2 after you get your good results.



Delivery Requirements

- If you want to deliver raw milk, you must meet the following requirements, as well as all of the other requirements in this booklet.
- You can only deliver within the state of Vermont.
 - Your customer has to pay for the milk in advance - either with a one-time payment, or through a subscription. We recommend that you keep track of the payments on the customer contact sheet, and keep track of the deliveries on your transaction record sheets.
 - Raw milk that is being delivered must be kept at 40 degrees Fahrenheit or colder at all times until the customer receives it. The best way to do this might be to set the containers in a cooler with a 50/50 mix of ice and water (be sure the water line is below the lip of the jar).
 - The delivery must occur at the customer's home.
 - You can deliver the milk directly to the customer (hand it to him/her) OR you can put it in a cooler or refrigerator at the customer's home, as long as it will be kept at 40 degrees Fahrenheit or colder until the customer gets it.
 - You must protect the milk from exposure to sunlight.
 - You can contract with someone else to deliver your milk to your customers. If the person you contract with does anything wrong, it is your fault. The law specifically states this, so make sure you trust the person and check out his/her system before contracting.
 - Even if you contract with someone, s/he must follow the rules above - the milk must go to the customer's home.

Checklist for Raw Milk Sellers

What if I don't follow the law?

Daily:

- Clean and sanitize your milking equipment.
- Clean and dry the udders before you milk.
- Keep a frozen sample from the day.
- Keep your transaction records.
- Make sure all milk is labeled.
- Make sure your milk is being cooled properly.
- Make sure your bottles are clean.
- Get contact information for any new customers.

Twice per month:

- TIER 2 ONLY: Test your milk.

Several times/year:

- Offer farm tours and make sure your customers sign that they have toured the farm.

Once per year:

- Make sure your rabies vaccines and TB/Brucellosis tests are up to date.
- TIER 2 ONLY: Report sales to Agency by March 1st.
- TIER 2 ONLY: Get your letter after your inspection.

Every 3 years:

- Test your water.

Other:

- Warning sign at the farm.
- IF USING ANTIBIOTICS: Test milk before selling.
- TIER 2 ONLY: Register with Agency of Agriculture.



◆ The Agency is not required to inspect Tier 1 producers. However, if someone complains or if for some other reason they are suspicious, they can inspect your farm for compliance with the Tier 1 requirements.

◆ Tier 2 producers will get an annual inspection if they are registered, which is the requirement. If you don't register and are in Tier 2, then you could be subject to penalties.

◆ The penalties are civil penalties.

◆ Generally, the Agency will start with a warning letter.

The potential penalties are found in 6 VSA 15, and they are as follows:

◆ In addition to other penalties provided by law, the secretary may assess administrative penalties, not to exceed \$1,000.00, for each violation of this title and Titles 9 and 20, unless a higher administrative penalty amount is provided for therein. In determining the amount of the penalty to be assessed under this section, the secretary may give consideration to one or more of the following:

- the degree of actual and potential impact on public health, safety and welfare resulting from the violation;
- the presence of mitigating or aggravating circumstances;
- whether the violator has been warned or found in violation of the same provisions of law in the past;
- the economic benefit gained by the violation;
- the deterrent effect of the penalty;
- the financial condition of the violator.

◆ Each violation may be a separate and distinct offense and, in the case of a continuing violation, each day's continuance may be deemed to be a separate and distinct offense. In no event shall the maximum amount of the penalty assessed under this section exceed \$25,000.00.

◆ In addition to the administrative penalties authorized by this section, the secretary may recover the costs of investigation, which shall be credited to a special fund and shall be available to the agency to offset these costs.

◆ Any party aggrieved by a final decision of the secretary may appeal de novo to the superior court within 30 days of the final decision of the secretary. The secretary may enforce a final administrative penalty by filing a civil collection action in any district or superior court.

Please contact Rural Vermont if you have questions about selling raw milk, or if you need help finding customers, or if you have ideas to share with other raw milk sellers!

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15 Barre St., Suite 2, Montpelier VT 05602
(802) 223-7222
www.ruralvermont.org