

Vermont Agency of Agriculture Testimony on S.70

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My role in providing testimony to the Committee on behalf of the Agency of Agriculture (VAAFAM) is to cover the following points:

1. Provide a science-based public health-related overview of the prevalence of pathogens in raw milk
2. Answer questions that committee members have asked to date of the Agency pertaining to S.70
3. Provide comments on behalf of VAAFAM to the requests/recommendations that have been presented in the 2014 Rural Vermont raw milk report and testimony that has been provided by others to date during the 2014 session.

Raw Milk Pathogen Prevalence

- Currently, 30 states allow the legal distribution of unpasteurized milk, which is also where nearly 75% of the raw milk-associated outbreaks have occurred. Americans have become ill after consuming raw milk from numerous sources, including cow-share programs and raw milk producers who are licensed, permitted, or certified.
- The prevalence of *Coxiella burnetii* (causative agent of Q Fever) was >94% in raw milk samples from the Northeastern, Midwestern, and Western regions of the US tested between 2001 and 2003 ([Kim et al., 2005](#)).
- The prevalence of *Campylobacter jejuni* is very widespread. It has been reported in bulk tank raw milk samples in Illinois, Michigan, Minnesota, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia, and Wisconsin, suggesting that the organism is ubiquitous. In these studies, *Campylobacter jejuni* was found in 0.4 to 12.3% of the bulk tank milk samples ([Doyle and Roman, 1982](#); [Jayarao et al., 2001 and 2006](#); [Lovett et al., 1983](#); [McManus and Lanier, 1987](#); and [Rohrbach et al., 1992](#)).
- The prevalence of *E. coli* O157:H7 and Shiga-toxin producing *E. coli* has been reported for bulk tank raw milk samples in Minnesota, Pennsylvania, South Dakota, Wisconsin and Ontario. *E. coli* O157:H7 was found in 0.87 to 10% of the bulk tank milk samples tested ([Jayarao et al., 2001 and 2006](#); [Padhye and Doyle, 1991](#); and [Steele et al., 1997](#)).

- The prevalence of *Listeria monocytogenes* has been reported for bulk tank raw milk samples in individual states (or grouped by region) for California, Colorado, Florida, Idaho, Illinois, Indiana, Iowa, Kentucky, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Mexico, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, Washington, Wisconsin, Vermont, Virginia, and in Alberta and Ontario, Canada. *Listeria monocytogenes* was found in up to 12% of the bulk tank milk samples tested (Farber et al., 1987; Fedio and Jackson, 1990; Jayarao et al., 2001 and 2006; McManus and Lanier, 1987; Liewen and Plautz, 1988; Lovett et al., 1987; Rohrbach et al., 1992; Slade et al., 1988; Steele et al., 1997; and Van Kessel et al., 2004), illustrating the widespread presence of *Listeria monocytogenes* in unpasteurized milk.
- The prevalence of *Salmonella* spp. has been reported for bulk tank milk samples in individual states (or grouped by region) for California, Colorado, Florida, Idaho, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, New Mexico, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, Washington, Wisconsin, Vermont, Virginia, and Ontario, Canada. *Salmonella* spp. were found in 0.17 to 8.9% of the bulk tank milk samples tested (Jayarao et al., 2001 and 2006; McManus and Lanier, 1987; Rohrbach et al., 1992; and Van Kessel et al., 2004), indicating the widespread presence of *Salmonella* in unpasteurized milk.
- The prevalence of *Yersinia enterocolitica* has been reported for bulk tank milk samples in Michigan, Minnesota, Pennsylvania, South Dakota, Tennessee, Wisconsin, Virginia, and Ontario, Canada. *Yersinia enterocolitica* was found in 1.2 to 18% of the bulk tank milk samples tested (Jayarao et al., 2001 and 2006; Moustafa et al., 1983; Rohrbach et al., 1992; and Schiemann, 1978). McManus and Lanier (1987) reported *Yersinia enterocolitica* in 48.1% of the samples tested, but they were all environmental, non-pathogenic strains.
- **Coliforms**
 - Coliforms are a large group of bacteria that are found in the intestines of warm-blooded animals. Most coliforms are not pathogenic, but their presence indicates contamination, usually from fecal sources. Coliforms are destroyed by pasteurization.
 - The prevalence of coliforms were detected in 62 to 95% of the raw bulk tank milk tested in regions that included California, Colorado, Florida, Idaho, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, New Mexico, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, Washington, Wisconsin, Vermont, and Virginia (Jayarao and Wang, 1999; and Van Kessel et al., 2004), suggesting the ubiquitous presence of these organisms in unpasteurized milk.

Responses to Committee Member Questions and Prior Testimony

Q: What are the fiscal implications for VAAFM of the licensing requirement for Tier 2 producers in S.70?

A: VAAFM does not have the budgetary cushion to establish a licensing program at no charge to the producer. As such, the Agency proposes the inclusion of a license fee for Tier 2 producers that would only partially offset the programmatic costs. A license fee that would fully compensate for program costs would likely be viewed as unfavorable by raw milk producers, especially considering the apparent lack of interest and/or market for more Tier 2 producers to date, resulting in that program cost being spread among only a handful of licensees. The following fee structure is proposed:

- Add Tier 2 producers to the milk handler license category and charge \$100.00 annually for the license. This license fee would only likely cover the average cost of one facility inspection per year, assuming that the inspector spends no more than one hour on-site and that the inspector is visiting up to 5 dairy farms per day, thereby diluting the mileage, fuel and time costs for any one farm. This license fee does not cover the administrative costs associated with license processing, whether on-line or paper-based, and it does not cover the mileage, fuel and time costs incurred with any follow up inspection within the year deemed necessary based on areas of noncompliance detected during the 1st annual inspection.
- In addition, establish a per-market fee in order to partially offset the cost associated with compliance inspections at farmers markets as specified by the completed Tier 2 license application. The following is proposed:
 - \$50.00 for one to three markets
 - \$100.00 for four or more markets

Q: What are the programmatic implications for VAAFM of the Tier 2 requirements for producers in S.70?

A: The criteria outlined in S.70 presumes that VAAFM will spot check Tier 2 producers at farmers markets where raw milk is being offered for pick up to pre-defined customers who have met the customer requirements in S.70. Historically, farmers market inspections have been challenging for the Agency. Most markets are operational in the evenings and/or on the weekends, and consistent inspection of commodities and devices at the markets requires overtime work, often at time and a half, of inspectors. Considering the level-funded budget, any additional monetary expenditure in this category results in funding deficits in other critical inspection categories. Prior efforts to inspect some devices (scales) at farmers markets on one day in a centralized manner have failed and would not be applicable to the requirements associated with inspection of a perishable commodity. Another programmatic implication of S.70 would be the time and cost associated with cross training dairy inspectors to also recognize compliance issues in other commodity areas, such as meat and scales. This is based on the fact that it does not make sense to send an inspector to a market to only focus narrowly on one product; while there, they would be expected to make sure all aspects of the market that fall under the Agency's purview are compliant.

Question for the Committee's consideration: Is it the expectation of the House Ag committee that VAAFMM will inspect Tier 2 producers at farmers markets if the language in S.70 is enacted into law?

Q: When on the premises of a Tier 2 producer, is the VAAFMM inspector there under the Agency's animal health authority?

A: No, the inspector is there under the right of entry authority outlined in 6 V.S.A. Chapter 151, which applies to all dairy operations. Enforcement authority for areas of noncompliance is given to VAAFMM by broad language in 6 V.S.A.

Q: Did VAAFMM "step up" its inspections on raw milk dairies last year?

A: No. The Agency has been inspecting raw milk dairies since the statutory change was enacted in 2009 but was not taking enforcement action against noncompliant producers until January 2013. VAAFMM generally allows a one year technical assistance/education period for producers or other stakeholders to learn about and bring themselves into compliance with new laws. In this instance, the Agency allowed approximately a three year period of education/outreach before the first compliance action was initiated. All stakeholders, including Rural Vermont and dairy co-ops, were notified in advance of this transition to an expectation of compliance and were asked to communicate this information to producers. The Agency's inspection capabilities on raw milk dairies have always been severely hampered by the lack of a registration requirement for Tier 1 producers

Q: Is NH going to start allowing the unregulated broad retail sale of raw milk in May 2014?

A: No. New Hampshire rules promulgated by the Dairy Sanitation Board that are expected to take effect in May 2014 will actually increase the regulatory framework for NH's larger-volume raw milk producers. In NH, the sale of raw milk is overseen by the NH Department of Health and Human Services. Despite the NH Legislature's decision to expand the sale of raw milk in that state, the following statement is located on their guidance document to pertinent NH residents:

The (NH) Department of Health and Human Services does not advocate or recommend the sale of raw milk. Raw milk, improperly pasteurized milk and raw milk fresh cheeses have been implicated in foodborne illness outbreaks of *Salmonella*, *Campylobacter*, *Listeria* and *E. coli* 0157:H7 in recent years. Pathogenic bacteria such as *Brucellosis*, *Campylobacter*, *Salmonella* and *Tuberculosis* can be shed in the milk of apparently healthy animals. *Listeria monocytogenes* is the leading cause of death from a foodborne pathogen.

Links to the NH statutes pertaining to the sale of milk and dairy products are the following:

<http://www.gencourt.state.nh.us/rsa/html/XIV/184/184-30-a.htm>

<http://www.gencourt.state.nh.us/rsa/html/XIV/184/184-84.htm>

The Committee is urged to speak to Chuck Metcalf, Supervisor for the NH Dairy Sanitation Program, for more information on NH's current and expected raw milk regulatory program.

Q: Does the State of NH offer free TB testing for raw milk dairy herds?

A: The TB testing completed by the State of NH every three years is not done for purposes of meeting raw milk requirements. This testing is carried out by the NH Department of Agriculture, Markets and Food, not by the NH Department of Health and Human Services, which is the state entity that regulates the NH dairy industry. The majority of NH livestock owners that take advantage of this testing opportunity are cattle and goat dairy operators.

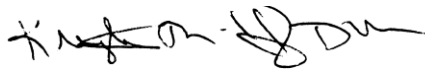
VAAFM Comments Regarding RV Raw Milk Report Recommendations

1. Develop reasonable and affordable animal health testing protocols for TB and Brucellosis
 - a. Comment: In January 2014, the Dairy Section Chief and State Veterinarians reviewed and amended the animal health testing requirements. Those amendments were communicated to Rural Vermont and the dairy co-ops, placed on the VAAFM website, and shared with VT food animal veterinarians. The most significant amendment was the change from requiring annual individual cow testing for Brucellosis and instead allowing BRTs to be performed after the initial whole herd test. This option is more economical and still meets the intent of the law.
2. Allow for sale of lightly processed raw dairy products
 - a. Comment: This is already allowed; producers may sell aged raw milk cheese freely. The allowances in New Hampshire have been brought up several times during testimony on S.70 as an example of a desirable way to handle raw dairy product sales. If VT were to follow suit, those producers would possibly be subject to the stricter requirements in the PMO.
3. Create an average daily or weekly allowance to accommodate farmers who may have more customers on a particular day of the week.
 - a. Comment: In essence, this is already being done by the VAAFM Dairy section during records review. The total volume of sales per week is divided by 7 days to determine an average. There are not adequate personnel resources within the Section to procure and review daily sales records. As long as totals submitted are reasonably well within limits and the average does not exceed current statutory allowances, no compliance action is initiated.

4. Develop testing rules and regulations that make it feasible for more farmers to sell at the Tier 2 level.
 - a. Comment: Many farms meet the Tier 2 testing rules and regulations now, and the voluntarily choose not to transition to the Tier 2 level, for a myriad of reasons.

5. Develop an inspection protocol that promotes a positive relationship between producers and inspectors.
 - a. Comment: This request is unclear and unfounded. The VAAFm dairy inspectors devote an exorbitant amount of well-placed time to educating and providing technical assistance to producers, including raw milk producers. They are partially responsible for the tremendous growth that the dairy industry has experienced in the past two years, and that growth is not slowing down as new processors continue to come on line. The dairy inspectors receive accolades regularly from industry members regarding their thoroughness and willingness to answer questions and provide technical assistance. The Agency would be happy to discuss this request further with Rural Vermont, but that organization would need to provide specific examples of the “protocols” they would propose and the problems they are suggesting need to be fixed.

Thank you for the opportunity to provide information on behalf of VAAFm regarding S.70. We are available to answer other questions if there are any.



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