

Cost-Recovery Mechanism to Support Raw Milk Inspection and Testing Activities

*Report to Governor and Legislative Committees
in fulfillment of ESSB 6052, sec. 309 (4)*

The department shall report to the governor and the appropriate committees of the legislature by September 1, 2015, with recommendations for an assessment or a cost-recovery mechanism to support the department's activities associated with inspections and testing of raw milk samples.

The State of Washington has seen tremendous growth in the raw milk industry. Raw milk producers benefit from regular inspections and product testing performed by the Washington State Department of Agriculture (WSDA), as do large pasteurized milk producers. The number of licensed retail raw milk facilities has increased from 6 in FY2007 to 47 in FY2014. Currently, 39 firms are licensed to sell unpasteurized raw cow and/or goat milk for human consumption. WSDA-analyzed product sample numbers have more than quadrupled since FY2007. When product testing finds dangerous bacteria, the agency expends additional resources for in-depth investigation and additional follow-up product testing.

This report identifies the costs associated with the routine inspection, product sampling, and laboratory testing of retail raw milk producers' products by WSDA. Additionally, the agency has estimated the cost of responding to an incident of raw milk contamination, since between 1 and 5 such events occur every year.

Food Safety Program Raw Milk Inspection Costs (not including lab analysis)

The WSDA Food Safety Program is responsible for licensing retail raw milk firms, inspecting them twice a year, collecting product samples monthly, and transporting or shipping them to the agency's Microbiology Laboratory in Olympia for testing. During the 2015 legislative session, the legislature approved an increase in the license fee for all Dairy Plant licenses - including raw milk licenses - from \$50 to \$250 per year. The total license fee revenue generated from 39 retail raw milk producers will now be \$9,750 per year. The following are estimates for the costs the Food Safety Program incurs each year to license, inspect, and collect product samples at 39 retail raw milk facilities:

	Total Annual Costs
Food Safety Officer (FSO) time to conduct four inspections/facility/year	\$73,000
FSO salary and benefits to collect monthly samples	\$44,000
FSO salary and benefits for travel associated with inspections and sampling	\$73,000

Sampling Supplies (sterile containers, etc.)	\$1,000
Food Safety Administrative salary and benefits	\$10,000
Shipping costs for samples (when samples are shipped to the lab)	\$2,000
Transportation costs (when agency staff courier samples to the lab)	\$5,000
Total	\$208,000

A total of \$208,000 is needed annually to cover the licensure, inspection, and collection of routine samples for the 39 currently licensed retail raw milk dairies. This represents a total cost of \$5,333 per licensee per year. If we reduce that figure by the \$250 licensing fee, the remaining program costs are \$5,083 per raw milk dairy per year.

Microbiology Laboratory Product Sample Analytical Costs

Retail raw milk accounts for nearly 10% of the total samples tested by the WSDA Microbiology laboratory each year (536/5,642). Each sample receives nine different tests. Completing these tests requires the work of 2.5-3.0 staff positions over a 5-day period. In 2014, the number of tests run on retail raw samples accounted for one-third of all the tests conducted by the Laboratory (4,824/14,470).

Samples are collected from raw milk dairies each month by FSOs. The Laboratory receives about 52 samples from the 39 retail raw milk dairies each month. The number of samples exceeds the number of dairies because some dairies produce more than one product (like cow milk, goat milk, skim milk, etc.) and each product must be sampled separately. The following table contains both the per sample costs and the annual costs for the Microbiology Laboratory to test samples from raw milk dairies:

	Per Sample	Per Year (624 samples)
Laboratory testing supplies	\$63	\$39,310
Equipment service and maintenance contracts	\$68	\$42,240
Staffing costs	\$273	\$170,450
Total	\$404	\$252,000

A total \$252,000 is needed annually to cover the routine laboratory analysis of raw milk samples. On a per dairy basis, the agency incurs costs of \$6,462 to conduct lab analysis of product samples.

Raw Milk Contamination Incident Response Costs

When product testing reveals the presence of dangerous bacteria, the agency works hard to determine the scope of the problem, conduct an outbreak investigation, ensure appropriate recall of contaminated products, and other response activities. This additional work involves both the Food Safety Program and the Microbiology Laboratory. Typically, the agency conducts between 1 and 5 of these follow-up investigations each year. Costs associated with these activities are difficult to project and can vary greatly based on the pathogen found. Laboratory activities to address three contamination incidents in one year would require about 4 weeks of work and 150 samples, assuming the laboratory analysts are

seeking only one pathogen. An estimate of both the Food Safety Program and Microbiology Laboratory costs for contamination incidents are shown below:

Food Safety Program Costs to Respond to Raw Milk Contamination Incidents

	Per Contamination Incident	Per Year for 3 Incidents
CRO Activities	\$500	\$1,500
Monitoring before Confirmation	\$166	\$500
Planning calls	\$2,000	\$6,000
Inspection, investigation, sampling activities	\$1,000	\$3,000
Recall activities	\$1,500	\$4,500
Effectiveness and recovery activities	\$1,000	\$3,000
Total	\$6,166	\$18,500

Microbiology Laboratory Costs to Respond to Raw Milk Contamination Incidents

	Per Contamination Incident	Per Year for 3 Incidents
Laboratory testing supplies	\$833	\$2,500
Equipment service and maintenance contracts	\$500	\$1,500
Staffing costs	\$3,333	\$10,000
Total	\$4,666	\$14,000

Cost Recovery Options

The agency's costs for routine licensing, inspecting, product sampling, and lab testing associated with raw milk licensees is \$460,000 per year. If the agency performed an average of three contamination incident responses in a typical year, the agency would incur additional costs of \$32,500 each year. The average annual raw milk inspection and testing program costs are thus \$460,000 + \$32,500 = \$492,500.

Each raw milk producer currently pays \$250 each year for licensing fees (\$250 X 39 = \$9,750). In 2006, a legislative appropriation related to raw milk resulted in \$45,000 GF-S funding to the agency annually. Current GF-S support and license fees total \$54,750 annually. The gap between existing funding specifically allocated to raw milk regulatory activities and costs is \$492,500 - \$54,750 = \$437,750 annually.

In addition to the current \$250 license fee, an annual assessment of \$12,378 (\$492,500 total costs - \$9,750 license fees ÷ 39 licensees) would be required from each licensee to completely offset the use of general funds and fully support the annual costs incurred by WSDA for inspection and testing. Since many raw milk producers are very small firms with only a few cows, an annual assessment of that magnitude would be extremely challenging for most raw milk licensees to absorb.