

VDACS Dairy Services:

**Keeping your dairy
udder-ly safe!**



Hunter Moyer

Dairy Services Program Supervisor

Who are we?



1 PROGRAM
SUPERVISOR



1 ASSISTANT PROGRAM
SUPERVISOR



1 PROGRAM SUPPORT
TECHNICIAN

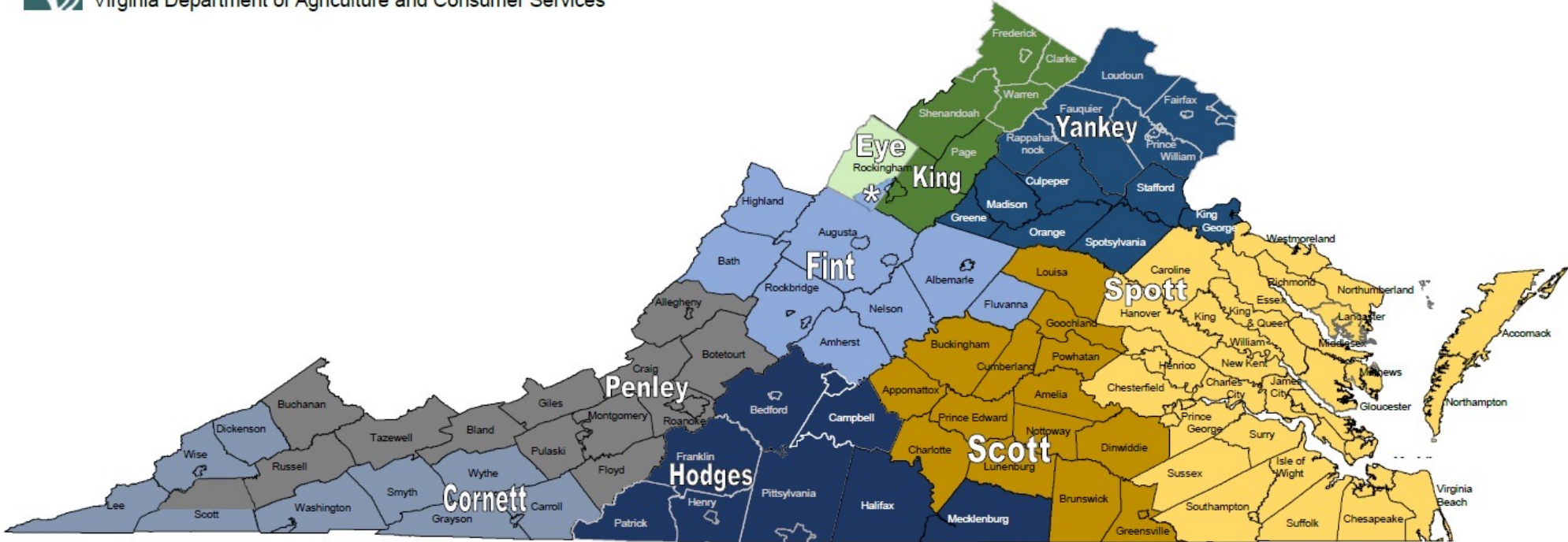


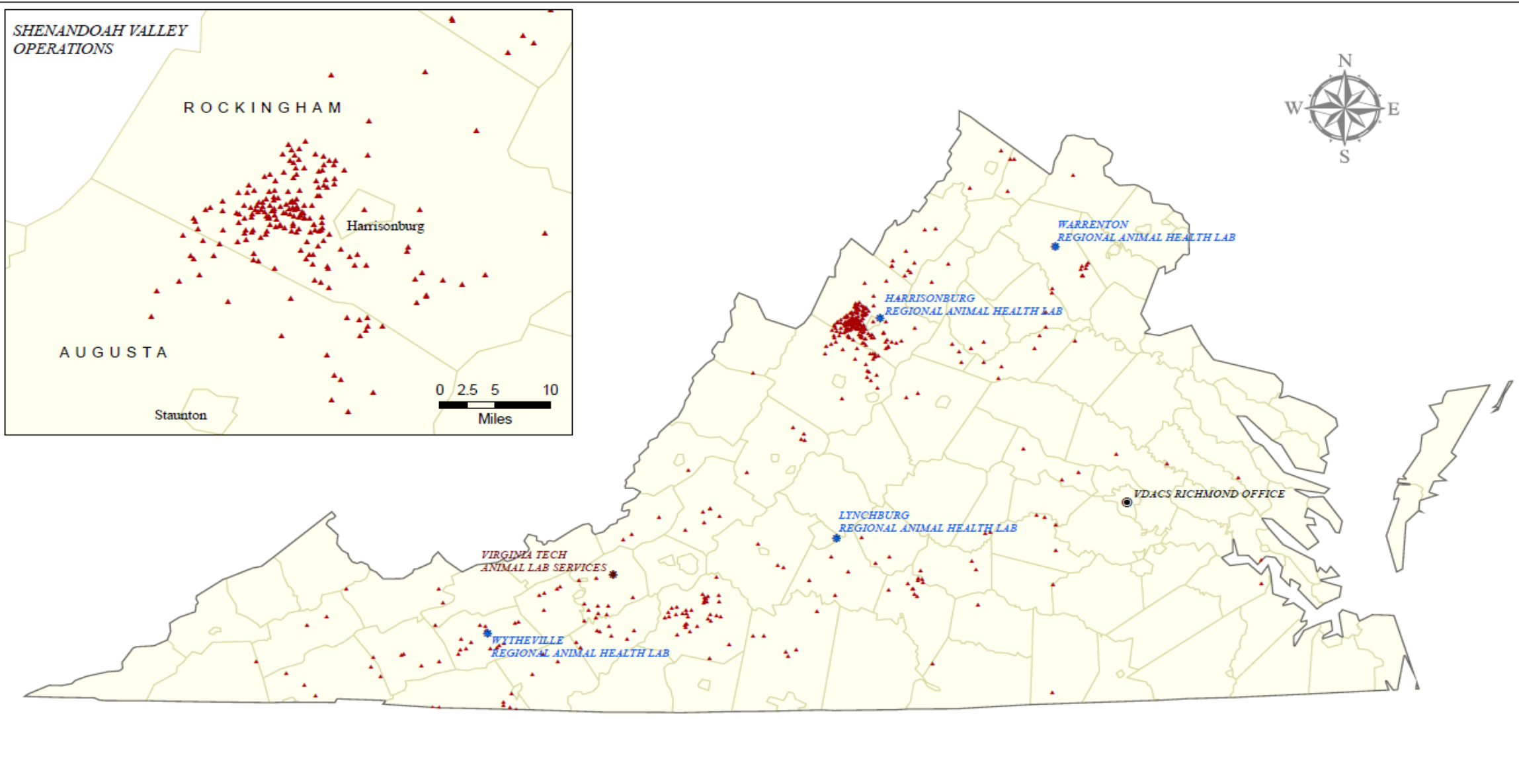
9 DAIRY INSPECTORS

Where are we?



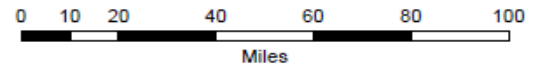
Dairy Inspector Territories
Office of Dairy and Food Services
Virginia Department of Agriculture and Consumer Services





VIRGINIA DEPARTMENT OF AGRICULTURE
AND CONSUMER SERVICES
OFFICE OF DAIRY & FOOD INDUSTRY SERVICES

GRADE A DAIRY FARMS COMMONWEALTH OF VIRGINIA



2023 DAIRY FACTS Virginia

- **90%** of all milk produced in **2022** was used and consumed in the form of fluid milk



The total amount of milk produced in 2022 equaled **165** million gallons.

The **top three** milk producing counties in Virginia:

1. Rockingham
2. Pittsylvania
3. Augusta

Virginia is home to about **70,000** dairy cows. Dairy cows produced an average of **7.8** gallons of milk per day.

Virginia has **377** dairy farms and a typical dairy farm has a herd of about **186** milking cows.

The average value of a day's milk per cow was about **\$18.68**. In 2022, a dairy cow in Virginia cost about **\$1,500**.

*All facts are based on 2022 USDA and AGI data.

Brought to you by the dairy farm families of the
SOUTHEAST



**THE DAIRY
ALLIANCE**

Learn more by visiting thedairyalliance.com

What do we do?

Inspections

Sampling

Enforcement

Equipment Review

Label Review

Consultations

Promotion / Education



Rules and Regulations

Milk and Dairy Products are some of the most highly regulated and safest* foods in the nation.

- [2VAC5-490 Regulations Governing Grade “A” Milk](#)
 - [2017 Edition of the Grade “A” Pasteurized Milk Ordinance](#)
- [2VAC5-501 Regulations Governing the Cooling, Storing, Sampling and Transporting of Milk](#)
- [2VAC5-510 Rules and Regulations Governing the Production, Processing, and Sale of Ice Cream, Frozen Desserts, and Similar Products](#)
- [2VAC5-520 Rules and Regulations Governing Testing of Milk for Milkfat, Protein, and Lactose Content by Automated Instrument Methods](#)
- [2VAC5-531 Regulations Governing Milk for Manufacturing Purposes](#)

* Raw milk not included!

From Cow to Cup!

Farms

- 350 Grade “A” Farms (1 goat)
 - Including 22 Robotic Dairies!
- 18 Manufactured Grade Farms (7 cow farms, 9 goat farms, and 1 sheep farm)
- Inspected a minimum of twice per year (83 items)
- Water sampled every 2 years for private well systems
- Raw Milk sampled a minimum of 4 out of every 6 months
 - FDA/PMO Grade “A” Cow Standards : <**750,000** SCC/mL ; <**100,000** SPC
 - Virginia Grade “A” Cow Standards: <**500,000** SCC/mL ; <**50,000** SPC
 - Antibiotic Residues – **a huge deal in the dairy industry!**
 - Random Sampling:
 - Radiological
 - Aflatoxins
 - Brucellosis
 - Tuberculosis

(Name of Firm) _____

 (Owner or Manager) _____

 _____ VA _____
 (Address)

Date MARCH 5, 1974
9:30 P.M.

EXAMINATION
 An official inspection made today of MILK FROM YOUR SUPPLY COLLECTED 3-4-74 (9:50AM)

Shows that you are violating VIRGINIA MILK AND CREAM LAWS
 as follows: Laboratory tests show that the milk was
Adulterated with ANTIBIOTIC RESIDUES.

Remarks: Your Grade "A" Permit is suspended.

W. J. Farley
 (INSPECTOR)

MILK DISCARDED 2558lbs
(3 MILKINGS)

- maintained (c)
- No swine (c)
- Manure stored inaccessible to cows (d)
- MILKHOUSE OR ROOM**
- 5. Construction and Facilities:**
- Floors**
- Smooth, concrete or other impervious material; in good repair (a)
- Graded to drain (b)
- Drains trapped, if connected to sanitary system (c)
- Walls and Ceilings**
- Approved material and finish (a)
- Good repair (windows, doors, and hose port included) (b)
- Lighting and Ventilation**
- Adequate natural and/or artificial light; properly distributed (a)
- Adequate ventilation (b)
- Doors and windows closed during dusty weather (c)
- Vents and lighting fixtures properly located (d)
- Miscellaneous Requirements**
- Used for milkhouse operations only; sufficient size (a)
- No direct opening into living quarters or barn, except as permitted by Regulation (b)
- Liquid wastes properly disposed of (c)

- UTENSILS AND EQUIPMENT**
- 9. Construction:**
- Smooth, nonabsorbent, corrosion-resistant, non-toxic materials; easily cleanable; seamless hooded pails (a)
- In good repair; accessible for inspection (b)
- Approved single-service articles; not reused (c)
- Strainers, approved design (d)
- Approved CIP milk pipeline system (e)
- 10. Cleaning:**
- Utensils and equipment clean (a)
- 11. Sanitization:**
- All multi-use containers and equipment subjected to approved sanitization process (see Regulation) (a)
- 12. Storage:**
- Left in treating chamber or sanitizing solution until used, or stored properly above floor (a)
- Stored to assure complete drainage; where applicable (b)
- Single-service articles properly stored (c)
- 13. Handling:**
- Sanitized milk contact surfaces not exposed to contamination (a)
- MILKING**
- 14. Flanks, Udders, and Teats:**
- Milking done in barn, stable, or parlor (a)

- Hands washed clean and dried before milking, or performing milkhouse functions; rewashed when contaminated (a)
- Clean outer garments worn (b)
- COOLING**
- 19. Cooling: Temperature gauge** _____ ° Milk _____ °
- Milk cooled at 50° F. or less, within 2 hours after milking; maintained thereat until delivered (a)
- VEHICLES**
- 20. Vehicles:**
- Vehicles clean (a)
- Constructed so as to protect milk (b)
- No contaminating substances transported (c)
- INSECTS AND RODENTS**
- 21. Insect and Rodent Control:**
- Fly breeding minimized by approved disposal methods (see Regulation) (a)
- Manure packs properly maintained (b)
- All milkhouse openings effectively screened or otherwise protected; doors tight and self-closing; screen doors open outward (c) X
- Milkhouse free of insects and rodents (d)
- Approved pesticides; used properly (e)
- Equipment and utensils not exposed to pesticide contamination (f)
- Surroundings neat and clean; free of harborage and breeding areas (g) X

CONTACT YOUR INSPECTOR PRIOR TO INSTALLING EQUIPMENT OR ALTERING CONSTRUCTION OF FACILITIES.

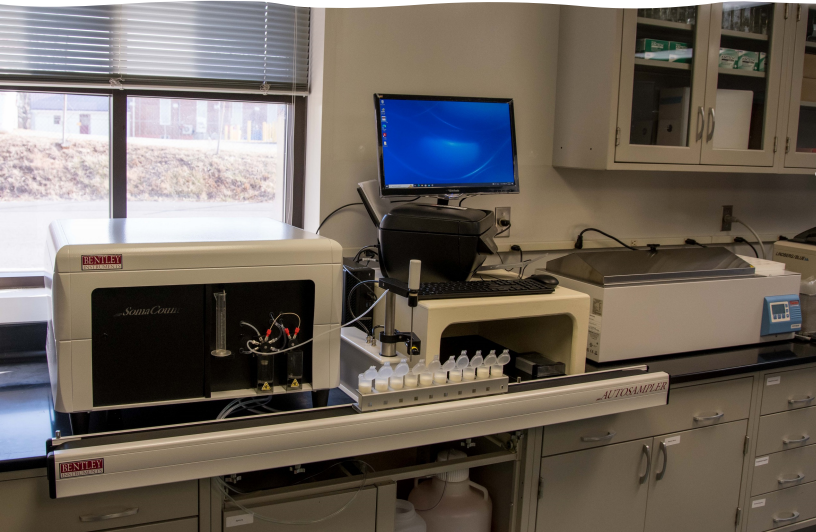
Remarks: ① Do NOT PROP MILK ROOM DOORS OPEN.
② CLEAN UP old MILKING BARN.

Date 3-18-74 | Inspector W. J. Farley



From Cow to Cup!

Milk Cooperatives



- With the exception of producer/processors, most milk in Virginia is sold through a milk marketing cooperative in order to achieve the best price for a farmer's milk. The co-op decides which plant to send the milk to, and who will pick the milk up at the farm, so the farmer can focus on his farm and herd.

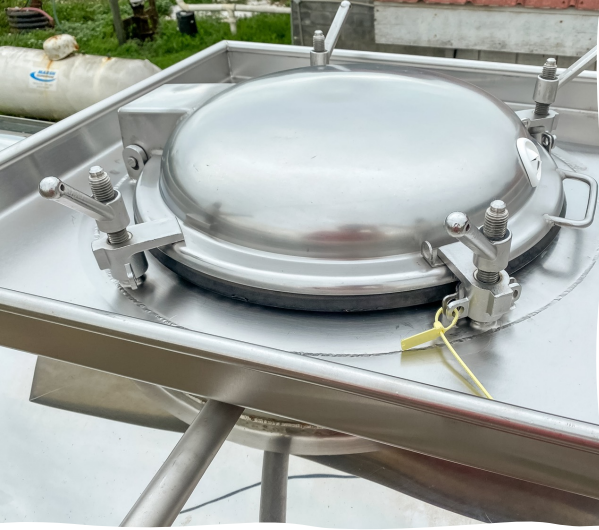
From Cow to Cup!

Hauler/Samplers

- 255 Bulk Milk Hauler / Samplers
- Evaluated a minimum of every 18 months (50 items)

Proper regulatory training is crucial because the hauler/sampler directly affects how much the producer (farmer) is paid for their milk!





From Cow to Cup!

Tankers / Transfer & Wash Stations

- 96 Tankers
 - Inspected a minimum of once a year (33 items)
- 4 Wash Stations / 1 Transfer Station
 - Inspected a minimum of every 6 months



From Cow to Cup!

Milk Processing Plants

Where the magic of pasteurization happens!

- 16 Grade “A” Processing Plants
- Inspected a minimum of 4 times per year (83 items)
- Quarterly Pasteurization Equipment Verification Checks
- Water sampled every 6 months for private well systems
- Pasteurized milk sampled a minimum of 4 out of every 6 months per product
 - FDA Standard : <10 Coliform/mL ; <20,000 SPC
 - Antibiotic Residues
 - Phosphatase

Virginia is a “Split State” !

The Virginia Department of Health oversees Grade “A” fluid processing plants through an MOU with VDACs



From Cow to Cup!

Ice Cream / Frozen Dessert Processing Plants

- 40 Ice Cream / Frozen Dessert Manufacturing Plants / Wholesalers
- Inspected a minimum of 4 times per year (37 items)
- Label Review
- Water sampled a minimum of every 6 months for private well supplies
- Finished Product sampled a minimum of 4 out of every 6 months
 - Coliform: <math><10/g</math> for plain; <math><20/g</math> for bulky flavored products
 - Standard Plate Count: <math><50,000/g</math>
 - Phosphatase
 - Random Testing:
 - VIDAS: Salmonella, Campylobacter, E Coli 0157, Listeria
 - Fats/Solids



From Cow (or Goat) to Plate!

Cheese / Butter Manufacturing Plants

- 44 Cheese / Butter Manufacturing Plants
- Inspected a minimum of 4 times per year (37 items)
- Quarterly Pasteurization Equipment Verification Checks
- Label Review
- Water sampled a minimum of every 6 months for private supplies
- Finished products sampled a minimum of 4 out of every 6 months
 - Phosphatase (pasteurized cheeses and butter only)
 - VIDAS: Salmonella, Campylobacter, E Coli 0157, Listeria
 - Antibiotic Residues (if applicable)
 - Random Testing:
 - Staph Aureus
 - Coliform



From Cow (or Goat) to Plate!

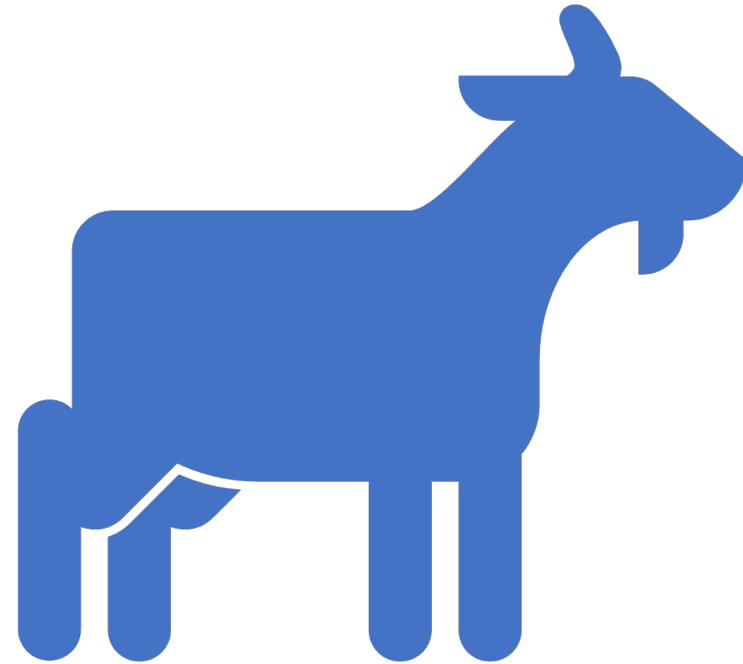
Cheese Manufacturing Plants

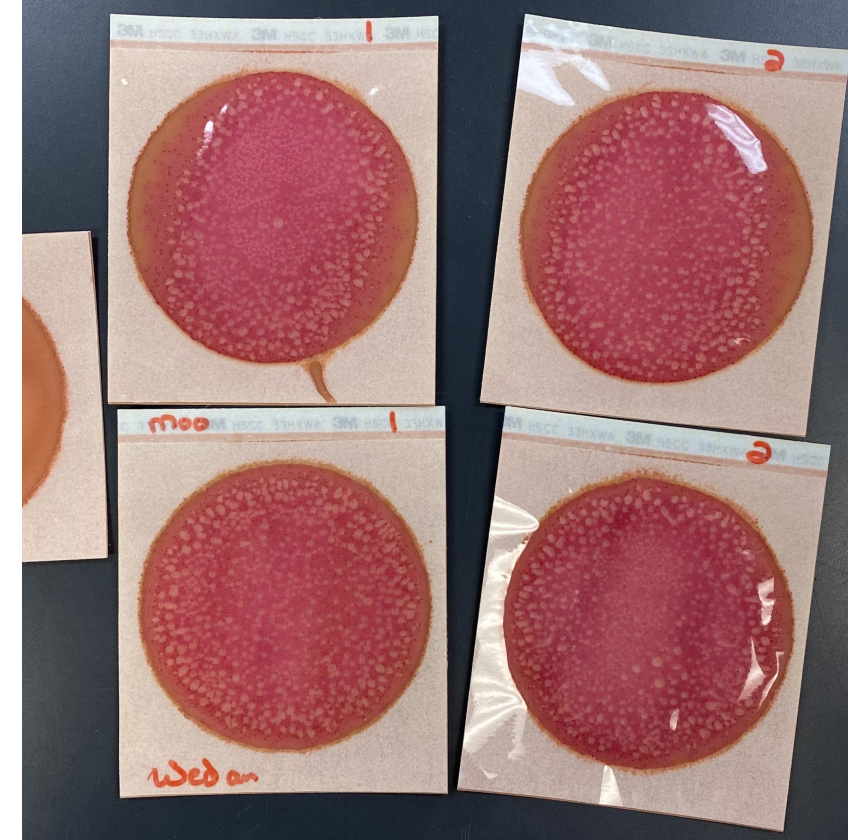
- Cheeses can be made from pasteurized milk or properly aged raw milk (above 35°F for a minimum of 60 days or the minimum number of days specified under the standards of identity for the specific variety of cheese)
- Cheeses MUST follow their Standard of Identity or cannot be sold as a standardized product.
 - Can be sold as a “style” or fanciful name
- Small scale exemptions



**DID YOU
KNOW?**

It takes 10 pounds of
milk to make 1 pound
of cheese!

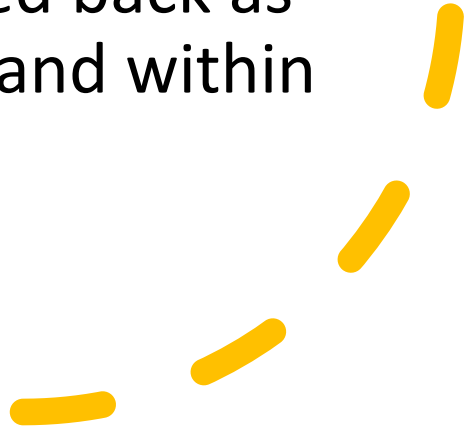




Other Things We Do

- Equipment Review
- Label Review
- Consultations
- Promotions/Education

How do I prepare to sell at a farmer's market?

- Must be permitted by VDACS Dairy Services or VDH (fluid milk)
 - Or another state's regulatory authority
 - Must be in good standing
 - No active recalls for products being sold at the market
 - New products must be sampled and held from sale until results are received back as negative for pathogenic growth, and within other safe regulatory levels
- 

**I'm finally
set up at the
Farmer's
Market!**

Now what?

- Almost all dairy products are considered a TCS (time/temperature control for safety) Food
 - Must be held below 41° F; or
 - Marked when taken out of refrigeration and sold, served, or destroyed within 4 hours.
 - This pertains to free samples, too!



**What
dairy
products
can't I
sell?**

**2VAC5-490-75. Sale of
unpasteurized milk for human
consumption prohibited.**

No person may offer to sell or sell, barter, trade, or accept any goods or services in exchange for unpasteurized milk if the unpasteurized milk is intended for human consumption.

Statutory Authority

§ [3.2-5206](#) of the Code of Virginia.

What dairy products can't I sell?

Any dairy products made without a permit!

Grade "A": 2VAC5-490-30. Permits.

- A. No person may produce, provide, manufacture, sell, offer for sale, or store in the Commonwealth, or bring, send, or receive into the Commonwealth, any milk, milk product, or condensed and dry milk product for use in the commercial preparation of grade A pasteurized, ultra-pasteurized, aseptically processed and packaged, or retort processed after packaging milk or milk product unless the person possesses a grade A permit from the state regulatory agency. Nothing in this chapter shall be deemed to require a person who is a broker, agent, or distributor's representative to have a grade A permit if the person buys condensed and dry milk product for, or sells condensed and dry milk product to, a milk plant that has a valid grade A permit from any state.

Ice Cream: 2VAC5-510-420. Issuing, suspension and revocation of permits.

- A. It shall be unlawful for any person who does not possess a permit from the Virginia Department of Agriculture and Consumer Services to bring into, send into, or receive into the Commonwealth of Virginia for sale, or to sell, or offer for sale therein, or to have in storage with intent to offer for sale or sell frozen desserts or frozen desserts mix identified in this chapter: Provided, that grocery stores, restaurants, soda fountains, and similar establishments where frozen desserts or frozen desserts mix are regularly served or sold at retail, but not processed, may be exempt from the requirements of this chapter.

Cheese/Butter: 2VAC5-531-50. Permits.

- B. No person may produce, process, manufacture, handle, package, reprocess, repackage, rework, offer for sale or sell any manufactured dairy product in the Commonwealth of Virginia unless the person possesses a permit from the Virginia Department of Agriculture and Consumer Services. The requirement for a permit shall not apply to (i) any person's establishment where a manufactured dairy product is served or sold at retail, so long as the manufactured dairy product is not produced, manufactured, reprocessed or reworked at the establishment; (ii) any person who distributes and does not process manufactured dairy product; or (iii) any person producing manufactured dairy product outside the Commonwealth of Virginia.

How do I know if a vendor is permitted to sell dairy products?



Email us at dairyservices@vdacs.virginia.gov



We can answer questions about dairy vendors, manufacturers, and producers from outside of Virginia, too!

Remember to thank a farmer!



Questions?

Find out more at:

<https://www.vdacs.virginia.gov/dairy-dairy-farms-milk-haulers-cheesemaking.shtml>

