

FOOD SAFETY

EDUCATION AND CERTIFICATION FOR NEW YORK'S AGRICULTURAL PRODUCERS

FOOD SAFETY IS CRITICAL FOR THE SUCCESS OF NEW YORK FARMS AND FOOD PROCESSORS

The CDC estimates that each year 48 million people get sick from a foodborne illness with over 128,000 hospitalized. According to the Center for Food Integrity, "food safety" is the third most common food topic searched online. The threat to human health from contaminated foods also represents a major financial risk for New York agriculture. The federal government recently implemented the Food Safety Modernization Act (FSMA) which requires farms and businesses producing foods to adhere to food safety standards. Wholesale buyers such as supermarkets and institutions increasingly require food safety certification through 3rd party audits of Good Agriculture Practices (GAP). These changes create a challenge for farms and food processors.

Harvest NY specialists are leading the effort to keep consumers safe and NYS farms and processing businesses successful in the emerging world of food safety. Despite the diversity of sectors we serve, each of our program areas touch on this topic; from the 4,600+ NY dairy farms, the 64,000 dairy processing jobs, to the 8.5 million residents of New York City. Although we focus on many other issues, Harvest NY recognizes that food safety is essential for New York farmers and consumers.



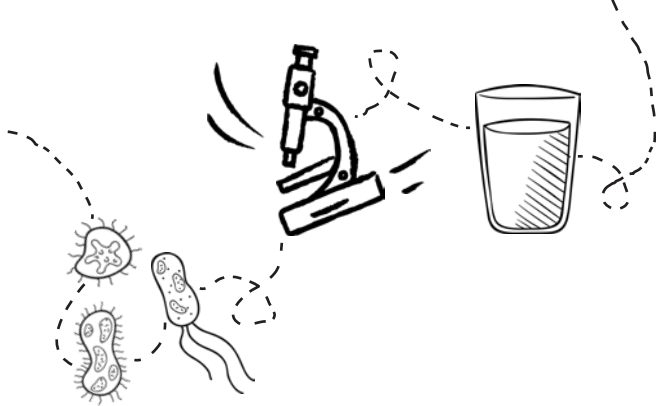
\$800,000
DAIRY FARM
MODERNIZATION
INVESTMENT,
DESIGNED BY
HARVEST NY, KEEPS
MILK WITH HIGH
BACTERIA COUNTS
OR ANTIBIOTICS
OUT OF THE FOOD
STREAM

HARVEST NY'S
SUPPORT OF THE
WESTERN NY FOOD
HUB LED TO THE
PURCHASE OF
\$417,195 OF NYS
SPECIALTY CROPS
FROM 19 NEWLY ON-
BOARDED FARMERS

DAIRY PROCESSING
SPECIALISTS
REACHED OVER
1,000 DAIRY PLANT
WORKERS WITH
OVER 16,000 HOURS
OF FOOD SAFETY
RELATED TRAINING

TWO AG ECONOMIC
DEVELOPMENT
SPECIALISTS
CERTIFIED TO TRAIN
FSMA WORKSHOPS
TO KEEP FARMS
COMPLIANT AND IN
BUSINESS





KEEPING MILK SAFE AND PROFITABLE THROUGH FARM MODERNIZATION



Despite the economic concerns stemming from several years of low farm gate prices of milk, some New York dairy operations have adopted a proactive approach by investing in farm improvements to increase efficiency, cow comfort, overall animal welfare, and, ultimately, milk quality.

Harvest NY's Farm Strategic Planning Specialist, Tim Terry, was instrumental in the planning phases for an \$800,000 (estimated) multi-year project in Wyoming County which includes a new dairy barn with a robotic milking system for ~250 Jersey cows, a bunker silo, and an earthen ag waste storage pond. Once populated, the new barn will relieve current overcrowding issues and will contribute to improved cow comfort and overall farm health.

Robotic milking systems remove much of the rote labor, reducing the potential for human error. Abnormal and/or unsaleable milk from cows undergoing treatment therapies is automatically diverted and sequestered apart from saleable milk, ensuring high bacteria counts or antibiotics will not enter the food stream.

The new bunker silo with a silage leachate collection system and the ag waste storage pond will protect environmental quality through collection and containment of nutrients until they can be properly applied to crops. This recycles the nutrients and significantly decreases the likelihood of runoff and subsequent contamination of water resources.

31
DAIRY
FOOD SAFETY
WORKSHOPS
CONDUCTED

500+
DAIRY PLANT
EMPLOYEES
PARTICIPATED IN
FOOD SAFETY
TRAININGS

16,000+
CONTACT HOURS
WITH NYS DAIRY
PLANT
EMPLOYEES

8
ONE-ON-ONE
FOOD SAFETY
PLAN
EVALUATIONS

2018 program stats

HARVEST NY PROVIDES CRITICAL SUPPORT FOR DAIRY PROCESSING SAFETY

The overall economic impact of dairy processing in New York is \$13.95 billion. NYS is the #1 ranked state for yogurt, cream cheese, sour cream and cottage cheese production. To maintain this valuable industry, food safety plans and workforce compliance are critical.

Dairy Processing Specialists Barb Williams (Northern New York) and Anika Zuber (Western New York) work alongside Cornell Dairy Foods Extension to assist New York dairy plants review and improve their food safety plans. This effort helps minimize food safety issues and prevent recalls. This not only ensures consumers are protected but also helps dairy processors maintain their relationships with their business customers since more and more retailers and wholesale businesses are requiring robust food safety and quality plans from their suppliers. Small and large dairy processors alike need to be consistently updating and adapting their food safety plans in order to retain their markets.

In addition to assisting dairy plants with food safety and food quality plans, it is imperative that the dairy processing workforce understands key food safety practices. Each year, the Harvest NY Dairy Processing Specialists conduct workshops for dairy processors regarding a variety of food safety topics including:

1. Dairy Science and Sanitation
2. Hazard Analysis and Critical Control Points (HACCP)/Food Safety Plans
3. Preventive Controls for Human Food
4. Internal Auditing
5. Pathogen Environmental Monitoring
6. Safe Quality Food (SQF) Implementation
7. SQF Quality Plans
8. High Temperature/Short Time (HTST)/Ultra Pasteurization
9. Food Defense

Harvest NY Dairy Processing Specialists make food safety training and outreach a priority so that New York remains a leader in high quality dairy production. These workshops ensure that all employees, at all levels, understand their role in creating a safe, wholesome product for consumers.



Urban settings encounter unique food safety considerations:

- Soil contaminants such as heavy metals and chemicals from former industrial sites
- Unsanitary equipment used for harvest and packing
- “Visitors” such as stray animals and homeless people



HARVEST NY WORKS FOR SAFE, LOCAL FOOD IN NEW YORK CITY

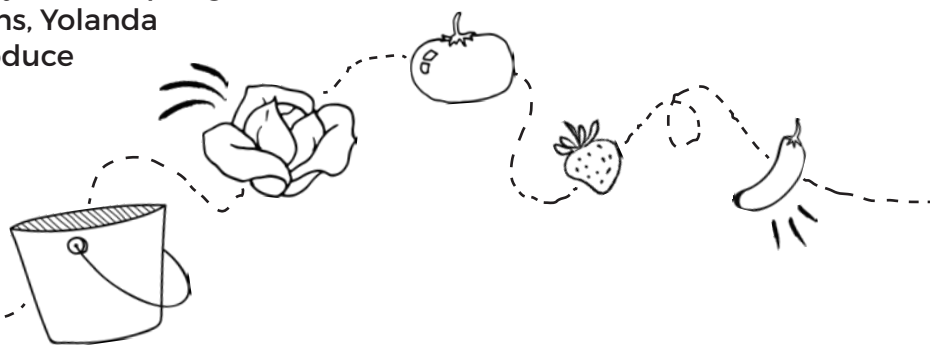
Commercial urban farmers in New York City, similar to producers upstate, sell through an array of marketing outlets, from restaurants and grocery stores to farm stands and CSAs. Unlike their rural counterparts, commercial urban farmers rarely generate the sales that mandate them to comply with the requirements of the Food Safety Modernization Act (FSMA). Despite being qualified exempt from FSMA, many urban growers have questions about food safety requirements for different marketing channels and in terms of general best practices.

Harvest NY's Urban Agriculture Program has launched food safety programming in New York City. Initial work has focused on general food safety best practices and clarifying confusion around food safety rules, such as differences between buyer-imposed programs, especially GAP certification (Good Agricultural Practices), and government-enforced food safety regulations, such as FSMA. Urban Agriculture Specialist Yolanda Gonzalez presented an "Urban Ag Food Safety" workshop for farmers-in-training in June at The Youth Farm in Brooklyn and in September at Kingsborough Community College Urban Farm. The training provided a practical guide to food safety for apprentices and interns working on urban farms.

Along with basic training, Yolanda has also provided one-on-one technical assistance to both soil-based and controlled environment agriculture producers on GAP certification requirements and food safety plans, as most producers do not have a written food safety plan. The ability to consult larger-scale farms on their options for obtaining food safety certifications leads to increase farm viability as it opens the door to selling produce directly to distributors and retail outlets, such as Whole Foods Market and the new Wegmans supermarket slated to open in Brooklyn next year.

In addition to teaching and consulting urban farms on best food safety practices to prevent food-borne illnesses, Yolanda has been working toward becoming a Produce Safety Alliance (PSA) Lead Trainer by gaining more teaching experience. This summer, Yolanda taught a module of the PSA Grower Training course in Voorheesville, NY to growers in the Hudson Valley and will be taking part in another FSMA training at the Seneca Produce Auction in late October.

In an effort to learn more about food safety and adopting best management practices in urban operations, Yolanda participated in tours organized by the Produce Safety Alliance at Square Roots, Brooklyn Grange, and Baldor's on October 2-3.



FARM FOOD SAFETY TRAININGS OFFER NEW OPPORTUNITIES FOR SMALLER FARMING OPERATIONS TO ENTER THE WHOLESALE MARKET

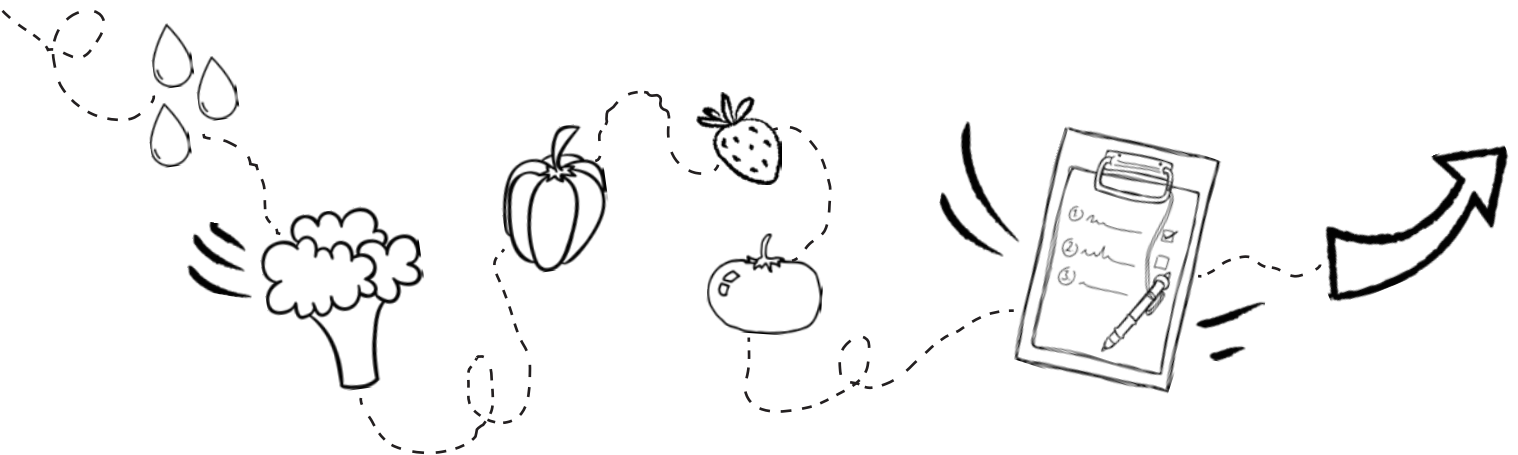
To prepare growers to realize wholesale market opportunities, Harvest NY Local Food and Ag Economic Development Specialists, Lindsey Pashow and Cheryl Thayer, have participated in a series of professional development opportunities and delivered various levels of food safety programming.

Recently, Lindsey Pashow became a trainer under the Produce Safety Alliance to provide food safety support to vegetable and fruit producers in Northern NY. As a trainer, Lindsey is able to team teach the Produce Safety Alliance modules, under a lead instructor. Further, she's working towards becoming a lead trainer, which enables her to lead trainings as needed in Northern NY. Recently, Lindsey taught modules at a grower training in Albany and provided educational information to the St. Lawrence Valley Produce Auction. Over the next few months, Lindsey will be team teaching modules at the Seneca Produce Auction grower workshop and the Produce Safety Alliance training in Jefferson County.

In Western NY, Eden Valley Growers/Western NY Food Hub is a large, multi-farm cooperative that requires GAP certification of their growers. Cheryl Thayer worked closely with the organization and Cornell food safety trainers to offer a targeted two-day GAP training to all growers interested in selling their produce through the Co-op/Hub. The food safety training attracted nearly 30 area produce farmers, some of whom went on to get third-party certified and are currently selling their goods through the Co-op/Hub.

From field to fork,
all members in
the fresh produce
supply chain have
a vested interest
in food safety.

Good food safety
practices begin
on the farm.





Fresh
VEGETABLES

Fresh
VEGETABLES

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VEGETABLES



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For more information about food safety and trainings offered in New York, visit:

Institute for Food Safety at Cornell University • INSTITUTEFORFOODSAFETY.CORNELL.EDU

Produce Safety Alliance • PRODUCESAFETYALLIANCE.CORNELL.EDU

Cornell University Dairy Foods Extension • DAIRYEXTENSION.FOODSCIENCE.CORNELL.EDU

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