
Food Safety Overview

Shauna Henley, Extension Educator, University of Maryland Extension-Northern Cluster

Food safety is no longer what you learned from your family elders, but rather an emerging expectation from your future buyers - safe, nutritious, and unadulterated foods. As a beginning farmer, food safety must be part of your farm's fabrication, while you grow and evolve the food safety culture of your operation. Staying up-to-date on the regulations and the science is your responsibility. The following will provide a broad introduction of the regulations, certifications, and resources in Maryland for food safety on your farm.

Quick overview of the Regulation Hierarchy:

It is important to have a basic understanding of the organization of regulatory agencies and jurisdictions around the food system. At the



top are federal level agencies created by Congress to regulate and enforce federal laws. The USDA (1862), FDA (1906), and EPA (1970), and each play a role in regulating some part of the food supply chain (e.g. organic certification, interstate commerce, microbial standards, waste water disposal). Underneath the federal agencies are state jurisdictions, that are regulated in Maryland by the Maryland Department of Agriculture (MDA), Maryland Department of Health (MDH), and Maryland Department of the Environment (MDE). Underneath the state departments are local county government's Environmental Health Services (EHS) department.

Typically at the federal level, it is expected that scientifically-based minimal standards for food safety are met, while state and county governments can choose to make more stringent regulations than what was federally introduced.

Certifications for Produce

Good Agricultural Practices & Good Handling Practices (GAP/GHP)

GAP/GHP was established in 1999, and is a voluntary audit for those growing produce (fruits and vegetables) and either pack, handle (post-harvest), and/or store produce. While it is voluntary, many buyers will require GAP certification from growers they purchase produce from. The goal of the audit is to help producers reduce and/or eliminate microbial contamination risks to prevent consumers from eating contaminated fresh produce. Growers should know whether or not buyers expect their farm operation to be GAP certified, as part of the buyer's food safety protocol.

The areas of focus to prevent microbial contamination during a GAP/GHP training are:

- Worker health and hygiene
- Water quality and safety
- Soil amendments - manure and compost use
- Animals - Domestic, wild, and livestock

GAP/GHP in Maryland

The Maryland Department of Agriculture (MDA), Food Quality Assurance Program, in collaboration with the University of Maryland host grower GAP/GHP training statewide for a nominal fee. Participants who complete the training will receive a certificate of completion, however, an operation will still require a food safety plan and an audit to be in full compliance.

The MDA Food Quality Assurance Program will perform the GAP/GHP audits. A grower will need to request an audit, and know the audit inspection questions in advance. There are other types of GAP/GHP are available, including: Mushroom GAP, Group GAP, Harmonized GAP and Aquaponics GAP (Pilot).

Food Safety Modernization Act (FSMA): Produce Safety Rule (PSR)

The Produce Safety Rule is a federally regulated standard for production, harvest, handling, packing, and holding of fruits and vegetables for human consumption. Unlike the voluntary nature of a GAP/GHP audit, the FSMA Produce Safety Rule establishes a mandatory legal obligation, for the farms subject to the rule, to follow certain food safety requirements.

According to the Produce Safety Rule, it is required that “at least one supervisor or responsible party for your farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration.” The curricula typically used is from the Produce Safety Alliance <https://producesafetyalliance.cornell.edu/>.

Who Must Comply with FSMA Produce Safety Rule?

Farming operations may be considered Covered (must comply with the PSR), Qualified Exempt (modified compliance), or Exempt (from the rule and complying). Farming operations that must comply with the Produce Safety Rule will vary, based on farm activities (which crops are grown and where they are sent) and revenue. Farming operations that grow certain commodities that are NOT covered by the rule are Exempt from complying with the Produce Safety Rule. Operations that grow commodities that are covered by the PSR must calculate their 3-year average annual produce sales, with inflation adjustments, to determine if they are Covered or Qualified Exempt. For more on compliance visit the FDA website at: <https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-produce-safety>

FSMA In Maryland

The Maryland Department of Agriculture (MDA), Food Quality Assurance Program, in collaboration with the University of Maryland host grower training statewide for a nominal fee. An all-day grower training will cover seven PSA curriculum modules. Participants who complete the training will receive a certificate of completion, however, an operation will need to implement various recordkeeping tasks to be in compliance. Due to the increased foodborne risk from consuming sprouts, special considerations have been made for farm operations that grow sprouts.

On Farm Readiness Review (OFRR)

As part of the FSMA Produce Safety Rule, farms may undergo a mock inspection. In order to prepare farm operations for an inspection, the National Association of State Departments of Agriculture Research Foundation (NASDA) is providing a confidential and free inspection, so farm operations are prepared for what a real inspection may look and feel like.

Livestock

If you are thinking of keeping animals for agricultural purposes, work with your local UME Agricultural Educator and MDA to ensure animal welfare best practices, and reduce any foodborne risks on your operation. Animals are known carriers of foodborne pathogens, and having a farm with mixed agriculture (produce and animals) will require more thought. Understand the various animal health programs through MDA, and other responsibilities that could relate to tagging, diseases, biosecurity, registration, etc.

<https://mda.maryland.gov/AnimalHealth/Pages/default.aspx>

Food Processing:

Starting a food business will require a strong understanding of local, state, and possibly federal regulations. The foods you process and where the food is processed will play an important role in what food safety laws your business will need to follow. Information on the Maryland Rural Enterprise Development Center <https://extension.umd.edu/mredc/specialty-modules/food-processing>, as well as your county's small business development are a wealth of knowledge on this topic. Become knowledgeable about the Maryland Department of Health's Office of Food Protection <https://phpa.health.maryland.gov/OEHFP/OFPCHS/Pages/Home.aspx>. Find information about how to meet state requirements for food processing, Cottage Foods, packaging, processing, and licensing your food product requires to meet state requirements https://mda.maryland.gov/foodfeedquality/Pages/food_feed_quality.aspx.

