Ensuring Food Safety in the Vineyard:

Wine Grapes



What FD&C Says

SEC. 301. 21 U.S.C. 331 The following acts and the causing thereof are hereby prohibited: 1 (a) The introduction or delivery for introduction into interstate commerce of any food, drug, device, tobacco product, or cosmetic that is adulterated or misbranded. (b) The adulteration or misbranding of any food, drug, device, tobacco product, or cosmetic in interstate commerce. (c) The receipt in interstate commerce of any food, drug, device, tobacco product, or cosmetic that is adulterated or misbranded, and the delivery or proffered delivery thereof for pay or otherwise. (d) The introduction or delivery for introduction into interstate commerce of any article in violation of section 404, 415, 505, or 564.

Introduction

Grapes must be unadulterated and safe for consumption, this includes grapes that are produced for wine. Two different United States (U.S.) Federal Acts govern the safety of grapes-the Food Safety Modernization Act and the Food, Drug, and Cosmetic Act. Both of these Acts are regulated by the U.S. Food and Drug Administration.

Food, Drug, and Cosmetic Act of 1938

The Food, Drug, and Cosmetic Act (FD&C) is a set of laws passed by Congress in 1938 giving authority to the U.S. Food and Drug Administration (FDA) to oversee the safety of food, drugs, and cosmetics. This set of laws prohibit the introduction, sale, or delivery of adulterated food into commerce (in state and/or across states). Adulterated food is food that contains human pathogens or toxins, pesticide residues above the legal limits, and/or foreign objects (i.e. glass, metal, plastic).

The Food Safety Modernization Act of 2011

The Food Safety Modernization Act (FSMA) was signed into law in 2011 and focuses on preventing the contamination of food with foodborne pathogens across the entire food system. FSMA includes seven major rules, recognizing that food safety is a shared responsibility. The FSMA Produce Safety Rule provides guidance to growers on standards for the safe growing, harvesting, packing, and holding of fruits and vegetables grown for human consumption. While all growers must take proper steps to reduce food safety risks, the Produce Safety Rule does not apply to all crop

types or products. The Produce Safety Rule provides an exemption for produce that receives commercial processing that adequately reduces foodborne pathogens of public health significance. Vineyards with wine grapes intended for wine production fall under this exemption if documentation from the buyer is obtained. This documentation states that the buyer has established protocols to adequately reduce the presence of microorganisms, through fermentation or another type of kill step [§112.2(3) and (4)]*. The grower must also have documentation that traces the wine grapes through the wine production process.

In 2019, the FDA announced, "In taking this step, we've considered the use of unique production processes that reduce the presence of foodborne pathogens. We're announcing today that we're not expecting hops, wine grapes, pulse crops and almonds producers to meet the requirements of the rule currently. Given the nature of these specific commodities, and the low risk that these products pose because of the way that they're processed and consumed, we do not expect producers of these commodities to comply with the Produce Safety Rule."



What About Juice, Must and Nectar?

Juice, must or nectar used solely as a starting material for a fermented alcoholic product is exempt from the Produce Safety Rule. The exemption only applies if the original juice, must or nectar is fermented into an alcoholic beverage that is no longer recognizable as juice at the time processing is complete [§101.3(k)].

For all other uses juice, must and nectar are subjected to Juice Hazard Analysis and Critical Control Points (HACCP) regulations. For more information on <u>Juice HACCP Regulations</u>: (https:// www.fda.gov/downloads/Food/GuidanceRegulation/ GuidanceDocumentsRegulatoryInformation/UCM569777.pdf)

My Wine Grape Food Safety Checklist

- \checkmark We only grow grapes for wine in our vineyard.
- ✓ We will ensure our wine grapes are not adulterated and do not enter into commerce in a manner that would cause someone to get sick or die.
- ✓ We document that our wine grapes will receive a commercial processing step to reduce foodborne pathogens of public health significance.
- ✓ We trace our wine grapes to ensure they receive commercial processing.

*Location in the Produce Safety Rule.

If you grow table grapes for fresh consumption, please see "Ensuring Food Safety in the Vineyard: Table Grapes" extension publication



North Central Region Center for FSMA Training, Extension and Technical Assistance

IOWA STATE UNIVERSITY Extension and Outreach



COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

What FSMA Produce Safety Rule Says

Vineyards are exempt from the FSMA Produce Safety Rule if the grapes they grow receive according to §112.2 ((b)(1): "commercial processing that adequately reduces the presence of microorganisms of public *health significance. Examples* of commercial processing that adequately reduces the presence of microorganisms of public health significance are processing in accordance with the requirements of part 113, 114, or 120 of this chapter, treating with a validated process to eliminate spore-forming microorganisms (such as processing to produce tomato paste or shelf stable tomatoes) and processing such as refining, distilling, or otherwise manufacturing/ processing produce into products such as sugar, oil, spirits, wine, beer or similar products."

<u>North Central Region Center</u> (www.ncrfsma.org), ncrFSMA@iastate.edu For information on <u>FSMA</u>: (www.fda.gov/Food/GuidanceRegulation/FSMA/) FSMA <u>Produce Safety Rule</u>: (www.fda.gov/food/guidanceregulation/fsma/ucm334114.htm)

This material was developed by the North Central Regional Center under a grant from the Food and Drug Administration. FDA has provided technical assistance in developing this material; however, this information has not been formally approved by FDA. It does not represent any agency determination or policy.

Prepared by: Angela Shaw PhD, Iowa State University, Smaranda Andrews PhD, Iowa State University; Jennie Savits MS, Midwest Grape and Wine Industry Institute/ Iowa State University; Melanie Lewis Ivey PhD, The Ohio State University; and Jacques Overdiep III, Iowa State University.

This institution is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to <u>www.extension.iastate.edu/diversity/ext</u>.