

Ensuring Food Safety in the Vineyard: Wine Grapes



What the Food, Drug, and Cosmetic Act 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

Introduction

Grapes must be unadulterated and safe for consumption, that includes grapes that are produced for wine. Two different acts of the United States Food and Drug Administration (FDA) govern the safety of grapes - the Food Safety Modernization Act (FSMA) and the Food, Drug, and Cosmetic Act.

Food, Drug, and Cosmetic Act of 1938

The Food, Drug, and Cosmetic Act is a set of laws passed by Congress in 1938 giving authority to the 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 or across states). Adulterated food is food that contains human pathogens or toxins, pesticide residues above the legal limits, or foreign objects (i.e. glass, metal, plastic).

The Food Safety Modernization Act of 2011

The Food Safety Modernization Act 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)]*. Documentation is required for each buyer and must be obtained for each new crop (i.e. annually). 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 [Juice HACCP Regulations](https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM569777.pdf): (<https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM569777.pdf>).

My Wine Grape Food Safety Checklist

- ✓ 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****

What the FSMA Produce Safety Rule says:

Vineyards are exempt from the FSMA Produce Safety Rule if the grapes they grow receive commercial processing 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,



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

IOWA STATE UNIVERSITY
Extension and Outreach



THE OHIO STATE
UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

[North Central Region Center](http://www.ncrfsma.org) (www.ncrfsma.org), ncrFSMA@iastate.edu

For information on [FSMA](https://www.fda.gov/Food/GuidanceRegulation/FSMA): (www.fda.gov/Food/GuidanceRegulation/FSMA)

FSMA [Produce Safety Rule](https://www.fda.gov/food/guidanceregulation/fsma/ucm334114.htm): (www.fda.gov/food/guidanceregulation/fsma/ucm334114.htm)

Prepared by Angela Shaw, associate professor in food science and human nutrition and extension specialist in food safety at Iowa State University; Smaranda Andrews, lecturer in food science and human nutrition at Iowa State; Jennie Savits, enology field specialist with the Midwest Grape and Wine Industry Institute; Melanie Ivey, assistant professor of fruit pathology and fresh produce safety at Ohio State University; and Jacques Overdiep III, former graduate student in food science and human nutrition at Iowa State.

Iowa State University Extension and Outreach does not discriminate on the basis of age, disability, ethnicity, gender identity, genetic information, marital status, national origin, pregnancy, race, color, religion, sex, sexual orientation, socioeconomic status, or status as a U.S. veteran, or other protected classes. (Not all prohibited bases apply to all programs.) Inquiries regarding non-discrimination policies may be directed to the Diversity Advisor, 2150 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, 515-294-1482, extdiversity@iastate.edu. All other inquiries may be directed to 800-262-3804.

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.