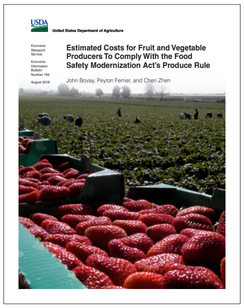
United States Department of Agriculture

A report summary from the Economic Research Service August 2018



Estimated Costs for Fruit and Vegetable Producers To Comply With the Food Safety Modernization Act's Produce Rule

John Bovay, Peyton Ferrier, and Chen Zhen

What Is the Issue?

In an effort to improve food safety by reducing foodborne illnesses, the Food Safety Modernization Act of 2011 (FSMA) empowered the U.S. Food and Drug Administration (FDA) to impose new regulatory requirements on food producers and handlers, to expand requirements for and inspections of food imports, and to issue mandatory recalls of food. As a result, FDA gained expanded authority to regulate fresh-produce production practices at the farm level. The FSMA Produce Rule will be implemented in phases beginning in 2018 and will affect farms supplying almost all fresh produce sold in the United States.

As part of the rule-making process, FDA estimated the cost of compliance with the Produce Rule for a few broad categories of farms distinguished by annual produce sales value and exemption status. In its analysis, FDA estimated the total costs of compliance to be $368 million for domestic farms (annualized over 10 years, using a 7-percent discount rate) but did not estimate the costs by commodities or regions. Using those original FDA estimates, this study provides estimates of the cost of compliance with the Produce Rule by commodity, State, and farm size (based on sales). The findings of the study have implications for understanding future competitiveness of smaller farms and markets for locally grown fruits and vegetables and enable researchers to characterize effects of FSMA on retail prices, by commodity.

What Did the Study Find?

The many fixed costs associated with the administrative and personnel components and the food safety process components of complying with the Produce Rule cause compliance costs to be higher as a share of revenue for smaller farms. For this reason, fruit and vegetables produced on larger farms are estimated to have smaller compliance costs than those produced primarily on small farms. Findings on the annual costs of compliance with the Produce Rule upon full implementation of the rule in 2022 include the following:

- Farms with annual produce sales over $3,450,000 account for 58.6 percent of U.S. farm produce sales and are estimated to incur annual costs of compliance of about 0.3 percent of the value of their produce sales. Farms with annual produce sales between $500,000 and $700,000 are estimated to incur annual costs of compliance of about 4.2 percent. Small farms (annual sales between $250,000 and $500,000) and very small farms (annual sales between $25,000 and $250,000) are estimated to incur annual costs of 6.0 percent and 6.8 percent, respectively.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

- Very small farms that qualify for a partial exemption from the rule are estimated to incur annual costs of around 2.4 percent of the value of their produce sales, compared with 6.8 percent for nonexempt farms of the same size.

- The annual costs of compliance with the Produce Rule are estimated to add about 0.3 percent to the farm cost of producing romaine lettuce (lowest among vegetables considered in this study) and 3.0 percent to the farm cost of producing snap beans (highest among vegetables).

- The annual costs of compliance with the Produce Rule are estimated to add about 0.7 percent to the farm cost of honeydew (lowest among fruits considered in this study). Among fruits primarily grown domestically for U.S. consumption, the highest farm cost is estimated at 3.0 percent for pears. These differences in cost of compliance across commodities reflect differences in farm sizes; fully regulated farms that grow honeydew tend to have much larger value of sales than fully regulated farms that grow pears.

- Differences in estimated cost of compliance, by State and county, depend on the average value of sales for farms subject to the FSMA Produce Rule in each locality. Fully regulated farms in Arizona tend to be quite large; on average, farms in Arizona that are subject to the FSMA Produce Rule are estimated to have the lowest annual cost of compliance among all States, at 0.6 percent of produce sales revenue. Farms in nine States with smaller produce-growing farms (Vermont, Arkansas, Minnesota, Kentucky, Mississippi, Iowa, Alabama, South Dakota, and Alaska) are estimated to have average compliance costs of 3.0 percent or higher.

- Our estimates of compliance costs assume that no farms are already in compliance prior to the enactment of the Produce Rule, thereby representing upper bounds on actual compliance costs. If large shares of farms were already in compliance prior to implementation of the rule, then actual compliance costs will be below our estimates.

How Was the Study Conducted?

This study drew on the FDA's published estimates of the 10-year cost of complying with the Produce Rule to develop a function that relates each farm's produce sales to its cost of complying with the rule. Using data from the 2012 Census of Agriculture, researchers first computed estimates of the cost of compliance for regulated farms falling within different farm size categories, with varying implementation timelines and possible exemptions over the 2016 to 2022 period. They then calculated the average estimated cost of compliance by county and State for different farm sales categories and by fresh-produce commodity.