Proposed regs on farm-level production of fresh fruits and vegetables

One of the two proposed food safety regulations released by the US Food and Drug Administration has direct impact on farm-level activities associated with the production of fruits and vegetables grown for human consumption (<https://s3.amazonaws.com/public-inspection.federalregister.gov/2013-00123.pdf>). The regulations contained in the proposed rule, “Standards for the growing, harvesting, packing, and holding of produce for human consumption,” are oriented toward the farms that are responsible for the vast majority of the unprocessed fruits and vegetables consumed in the US.

In developing this rule, the FDA looked at major outbreaks of foodborne illnesses caused by contamination with microbiological hazards—primarily shiga-toxin producing E. coli, Salmonella, Listeria monocytogenes, Cyclospora, Shigella sonnei, and Hepatitis A. “From 1996 to 2010, approximately 131 produce-related reported outbreaks occurred, resulting in 14,132 outbreak-related illnesses, 1,360 hospitalizations, and 27 deaths.” Nearly 90 percent of the outbreaks were associated with sprouts; leafy greens such as lettuce and spinach; tomatoes; melons such as cantaloupe and honeydew; berries such as raspberries, blueberries, and strawberries; fresh herbs such as basil and parsley; and green onions.

Exclusions from the rule are produce that are rarely consumed raw, produce that is used for personal or on-farm consumption, produce that is commercially processed and receives a “kill step,” and farms that have an average value of food sold during each of the previous three years of $25,000 or less. Modified rules apply to farms between that level and $500,000 in average sales during the last three years.

While a large number of very small producers are exempt from the proposed regulations, the regulations do identify a number of issues that are important for producers of all sizes to take into consideration.

In general, “the proposed rule would establish science-based standards for the safe growing, harvesting, packing, and holding of produce on farms.” The proposed new standards fall into six major areas: worker training and health and hygiene; agricultural water; biological soil amendments; domesticated and wild animals; equipment, tools, and buildings; and sprouts.

While many of the proposed regulations fall into the “That’s obvious” category, serious illnesses and death can be traced to violations of various common sense procedures. As a result the FDA has had to codify a set of standards to protect all of us from illnesses caused by the mishandling of fruits and vegetables during their growing, harvesting, packing, and holding.

While one would like to assume that rules would not be needed in the area of personal hygiene, that is the first area listed by the FDA. The new rule establishes qualification and training requirements for all personnel who handle covered produce and requires documentation of the required training. In addition the rule established hygiene practices “needed to prevent persons, including visitors, from contaminating produce with microorganisms of public health significance.”

The second area primarily deals with agricultural water that comes in contact with the “harvestable portion of covered produce or food-contact surfaces.” This is primarily irrigation water and water that is used to wash or hydrate fruits and vegetables. The requirement is that the water be of “safe and…adequate sanitary quality for its intended use, including requirements for treating such water…monitoring its treatment” and maintaining appropriate records.

The proposed rule establishes “requirements for determining the status of biological soil amendment of animal origin,” prohibits the use of human waste for growing covered produce except in compliance with EPA regulations,” establishes “requirements for treatment of biological soil amendments with scientifically valid…processes,” establishes “application requirements and minimum application intervals for untreated and treated biological soil amendments of animal origin,” and requires appropriate documentation.

The fourth area deals with wild and domestic animals and requires a reasonable waiting period between grazing and harvesting of covered produce.

The next area, equipment, tools, and buildings establishes “requirements related to equipment and tools that contact covered produce and instruments and controls (including equipment used in transport), buildings, domesticated animals in and around fully-enclosed buildings, pest control, hand-washing and toilet facilities, sewage, trash, plumbing, and animal excreta;” and requires “certain records related to the date and method of cleaning and sanitizing equipment used in growing operations for sprouts, and in covered harvesting, packing, or holding activities.”

The sixth area of regulations is concerned with sprouts and establishes various measures with regard to growing of seeds or beans for sprouting along with measures that must be followed in the sprouting process. There are also requirements for testing of the growing environment and irrigation water for specific pathogens. Again, as in other areas there is the requirement for documentation that appropriate procedures have been followed and results recorded.

Some of the rules seem common sense actions one would automatically take in growing fruits and vegetables. Others take a little more thought, but are grounded in problems that have caused serious outbreaks. While production costs and retail prices will be affected, one or more of these rules may prevent us from getting seriously ill, and thankfully, we may never know if it does.

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