

FDA Continues to Focus on Tech in New Era of Smarter Food Safety

July 13, 2021 Suzie Trigg

PRACTICES FDA Regulatory and Compliance, Food, Beverage and Restaurant

FDA announced its New Era of Smarter Food Safety in 2019 and released its blueprint of goals in July 2020 and has made clear that it intends to continue to leverage new and emerging technologies to improve food safety and traceability. Now, FDA is engaging industry stakeholders – and others – in furtherance of its goal to bring better technologies and interconnected digital systems to the table to support food safety.

On April 29, FDA launched the first in a series of “Tech Talk” podcasts on how emerging technologies can address and accelerate the response to food safety threats.

On June 1, FDA launched a challenge to industry stakeholders, including technology providers, entrepreneurs, and innovators called “[The FDA New Era of Smarter Food Safety Low- or No-Cost Tech-enabled Traceability Challenge](#).” FDA is asking stakeholders to develop traceability tools that can be implemented in a scalable, cost-effective manner. The Challenge submission period is June 1-July 30, 2021 and it demonstrates the FDA’s recognition that for food traceability to be truly successful, food operations of all sizes must have access to affordable, scalable traceability solutions.

This inaugural podcast on April 29, entitled “[Tech Enabled Traceability](#),” outlined the ongoing efforts of FDA, the food industry and standard-setting organizations to establish to uniform systems of food surveillance and interoperable capabilities across a dizzyingly diverse and complicated food supply chain.

Experts from the Institute of Food Technologists (“IFT”), the GS1-US standards organization and the Food Marketing Institute discussed the myriad initiatives and pilot projects that are beginning to identify a common set of concepts, data points and tools by which manufacturers, distributors and retailers can quickly trace the origin and location of an individual food commodity.

The field is developing rapidly. A proposed FDA rule published for comment in September could soon require new trace back capabilities and record keeping on growers, processors and distributors of leafy greens, seafood, deli salads and other “high-risk foods.” (“Requirements for Additional Traceability Records for Certain Foods,” 59 Fed. Reg. 59984, Sept. 23, 2020).

In the “Tech Talk” podcast, Deputy FDA Commissioner Frank Yiannas, with an apparent nod to the proposed traceability rule, predicted that with a few years “we could have something like FedEx tracking” for all food commodities and finished products. For their part, the panelists predicted that within 5-6 years, some retailers could begin adopting QR barcodes providing consumers with farm-to-fork information about product origins and distribution.

The podcast, featuring experts who have approached the problem from the retail, standard-setting and technical perspectives, provided an overview of the current challenges. The key takeaways are as follows:

- Efforts to improve food traceability have been underway for over a decade, beginning in earnest when IFT launched its traceability project in 2010, four years after the nationwide spinach recall. IFT now maintains a Global Traceability Center that can provide core concepts and resources for the developers of traceability systems.
- The biggest challenge is “interoperability,” *i.e.*, getting systems that follow uniform standards for capturing data and can “talk” to each other. The panelists acknowledged that a single solution to this issue is simply not practicable yet, given the size of the food sector and the diversity of suppliers, processors, retailers and other actors.
- The most effective approaches will be the simplest ones, *i.e.*, where food safety, IT, supply chain and logistics teams are all drawing their information from a common platform and using a common language. GS1-US has developed case studies and implementation plans that can help these individual groups speak a common language of traceability.
- The panel emphasized the potential public health and efficiency benefits of improved traceability. Risk management, understandably, was said to be the biggest advantage. In view of the available technology, in the very near future, a firm will have little or no excuse for not being able to pinpoint immediately any commodity’s origin, quantity and current location.
- FDA is calling on firms across the food industry to start pilot projects, asserting that “early adopters” will see immediate benefits and competitive advantages. The panelists agreed that one of the current challenges is to “bring first-mile actors into the fold,” especially small-scale firms. GS1, for example, explored effective software and hardware solutions with seafood producers in the Philippines.

This first podcast effectively outlined the challenges, methods and the benefits of adopting of uniform traceability standards. FDA has promised quarterly “Tech Talk” podcasts that can be expected to highlight the priorities of its “New Era of Smarter Food Safety” initiative. Possible future topics could include updates on artificial intelligence, retail delivery oversight and food safety culture.