



New Era of Smarter Food Safety

FDA Plan for the Future

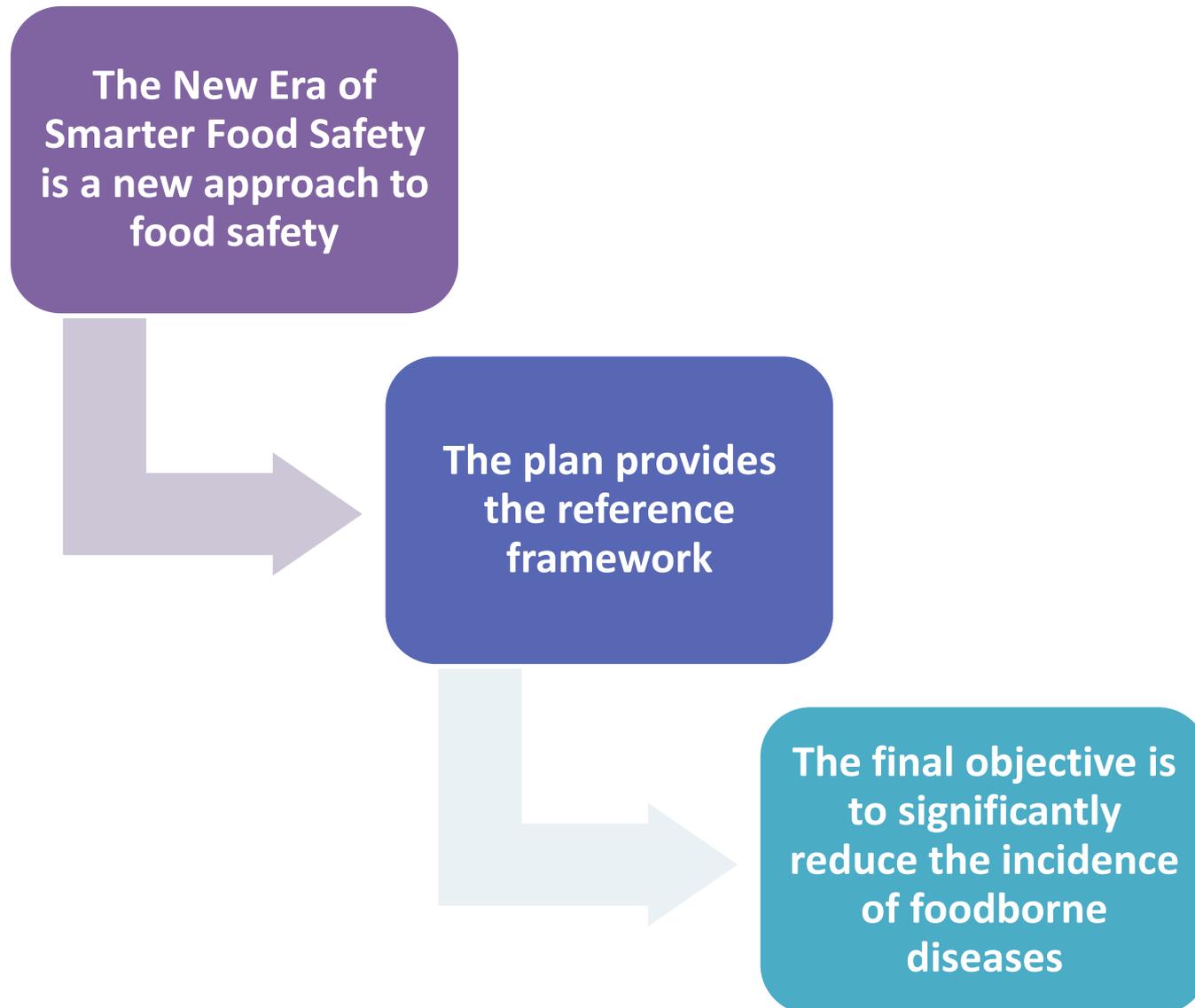
Food Safety Modernization Act



Other points to consider



Background information and objectives



Tech-enabled Traceability



Smarter Tools and Approaches for Prevention and Outbreak Response



New Business Models and Retail Modernization



Food Safety Culture



Tech-Enabled Traceability



Tech-enabled traceability

1.1 Develop the essential components



Tech-enabled traceability



1.2 Promote and incentivize the adoption of new technologies by the industry

Tech-enabled traceability

1.3 Leverage digital transformation



Proposed rule: “Requirements for Additional Traceability Records for Certain Foods”



- Additional record-keeping requirements
- List of food traceability
- Section 204 (d) of the FSMA
- Standardization of data and information

Proposed rule: “Requirements for Additional Traceability Records for Certain Foods”



- Key Data Elements (KDE)
- Critical follow-up events
- Record availability
- Compliance dates

Proposed Food Traceability List (FTL)

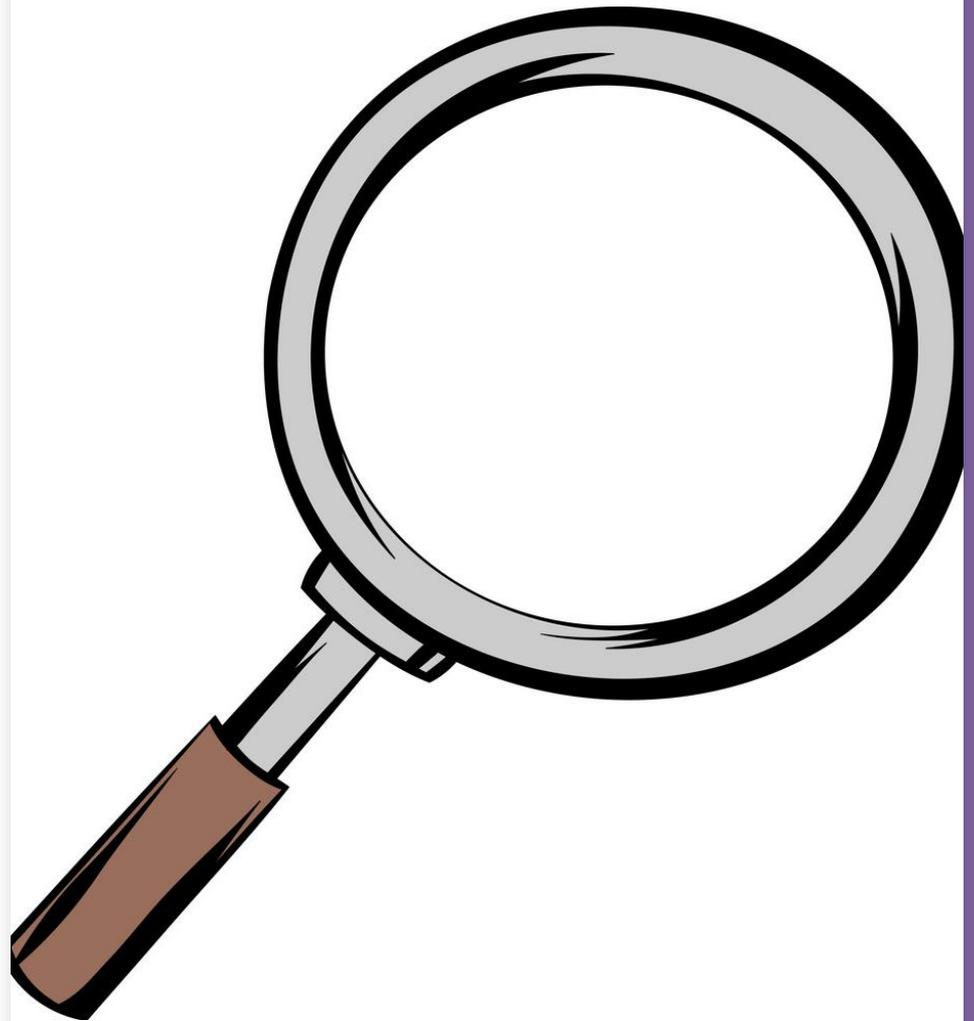
Cheeses, other than hard cheeses	Sprouts (fresh)
Shell eggs	Tomatoes (fresh)
Nut butter	Tropical tree fruits (fresh)
Cucumbers (fresh)	Fruits and Vegetables (fresh-cut)
Herbs (fresh)	Finfish, including smoked finfish
Leafy greens (fresh), including fresh-cut leafy greens	Crustaceans
Melons (fresh)	Mollusks, bivalves
Peppers (fresh)	Ready-to-eat deli salads



2. Smarter tools and approaches for outbreak prevention and response

Smarter tools and approaches

2.1 Strengthen root-cause analysis





Smarter tools and approaches

2.2 Strengthen predictive analysis



Smarter tools and approaches

2.3 Mutual domestic trust



Smarter tools and approaches

2.4 Inspection, training and compliance tools





Smarter tools and approaches

2.5 Outbreak response



Smarter tools and approaches

2.6 Modernization of product recall





3. New business models and modernization of retail stores



Online purchase of food in the U.S.

Before the 2019 pandemic, online purchases were



US\$ 35 billion per year
3.4% of US\$ 1.02 trillion



During the 2020 pandemic, it reached

US\$ 106 billion per year
10% of US\$ 1.04 trillion



After the pandemic, in 2025, it could reach

US\$ 250 billion per year
21% of US\$ 1.16 trillion



New business models and modernization of retail stores

3.1 Ensure the safety of the food produced or delivered by using new commercial models





New business models and modernization of retail stores

3.2 Modernizing the traditional food safety approach in retail stores



4. The Food Safety Culture



What is the Food Safety Culture?



- Culture is a difficult concept to define and understand, especially for those working in food safety.
- For Coreil, Bryant y Henderson, 2001, culture refers to the patterned ways of thought and behavior that characterize a social group, which are learned through socialization processes and persist through time.
- But in simpler terms, we will define culture as the way in which we do things, our behavior.
- A food safety culture can be defined as the set of values, beliefs and behaviors of the employees, workers and executives of a food company with regard to the need of producing safe food.

Evolution of food safety management



➔ **SAFETY MANAGEMENT SYSTEMS**



➔ **SAFETY CULTURE**

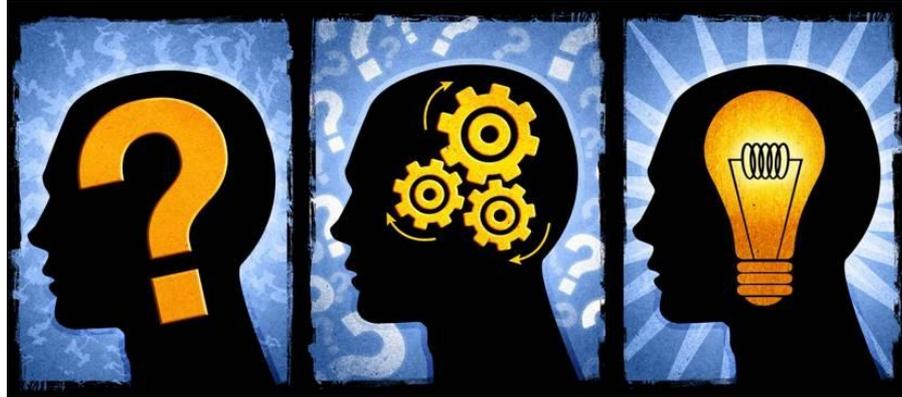


GOOD MANUFACTURING PRACTICES



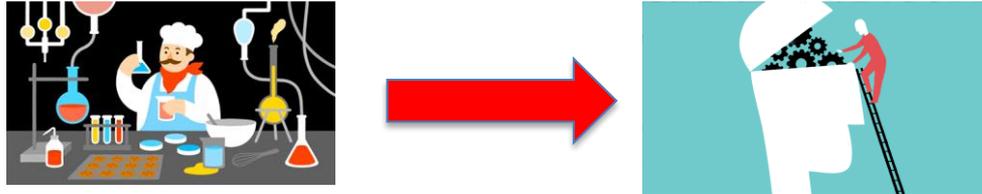
GOOD AGRICULTURAL PRACTICES

The strategic role of the food safety culture



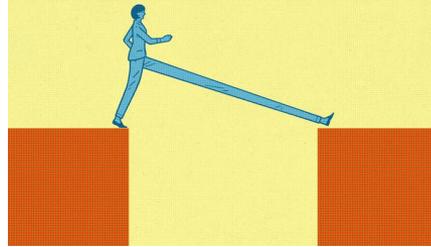
- The decisions, activities and behaviors of everyone working in a food company will have an influence on food safety
- As companies develop a food safety system or reinforce existing ones, culture will appear as a key component.

From food safety science to human behavior science



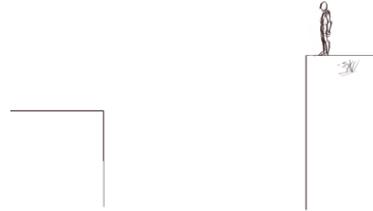
- The safety culture of a facility that produces, processes, pack and/or stores food is made up of values, attitudes, competencies and individual and collective behavior standards that will determine the level of commitment of an organization.
- The food safety culture is determined by scientific studies focusing on the behavior of people and work teams, and how they are shaped by their work environment.
- Training alone can give a false sense of security.
- Only by understanding and influencing their behavior will we be able to integrate food safety into the culture of an organization and promote better behavior.

Gaps in Food Safety Culture



- Stop considering food safety as an element separate from all other important issues.
- Put food safety at the center of your business; it will change people's perception of it.
- The training of workers, albeit important, is not the solution to a poor food safety culture.
- Understand that the food safety culture of a company is an asset.

Closing the gaps in Food Safety Culture



- Base your objectives to strengthen the food safety culture on what is possible, while also focusing on the desired results.
- Get in touch with your emotions to promote change.
- Approach the authentic informal leaders. These employees have a very negative vision of how things work.
- Visible and concrete change in the behavior of executives and their way of working.

The importance of Leadership and Innovation



Challenges of the FDA to support a Food Safety Culture



(1)

4.1 Promote food safety throughout the food system.



Challenges of the FDA to support a Food Safety Culture(2)

4.2 Promote food safety even more throughout the Agency.



Challenges of the FDA to support a Food Safety Culture(3)

4.3 Develop and promote a smarter consumer education campaign on food safety





The goal of food safety professionals is to create a safety culture, not a safety program

Frank Yiannas

Implementation

- **Leading team**
- **Identification of deliverables:**
 - **Short term**
 - **Long term**
- **Collaboration**
- **Transparency**



Leading team

Head of Implementation: Sharon Mayl (OFPR)

- Key element 1: Tech-enabled traceability
 - Kari Irvin (CFSAN/OCORE)
 - Caitlin Boon (OFPR)
- Key element 2: Smarter tools and approaches for outbreak prevention and response
 - Mark Moorman (CFSAN/OFS)
 - Vinetta Howard King (ORA/OHAFO)

Key element 3: New business models and modernization of retail stores

- Laurie Farmer (ORA/OHAFO)
- Andreas Keller (CFSAN/OFS)

Key element 4: Food safety culture

- Conrad Choiniere (CFSAN/OAO)
- Don Prater (OFPR)

For more information:



- www.fda.gov/SmarterFoodSafety
 - **Subscribe for updates**
- **Contact us:** smarterfoodsafety@fda.hhs.gov



New Era of Smarter Food Safety

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Welcome to the New Era of Smarter Food Safety. The world around us is changing rapidly; many believe we will see more changes in the food system over the next 10 years than we have in decades. Foods are being reformulated; there are new foods, new production methods, and new delivery methods; and the system is becoming increasingly digitized.

To keep pace with this evolution, FDA is taking a new approach to food safety, leveraging technology and other tools to create a safer and more digital, traceable food system.

Smarter food safety is about more than just technology. It's also about simpler, more effective, and modern approaches and processes. It's about leadership, creativity, and culture.

Our ultimate goal is to bend the curve of foodborne illness in this country by reducing the number of illnesses.



On July 13, 2020, FDA Commissioner Stephen Hahn announced the New Era of Smarter Food Safety Blueprint, introduced by Deputy Commissioner for Food Policy and Response Frank Yiannas. [Watch the video.](#)

Contact Us

If you would like more information about the New Era of Smarter Food Safety, contact us in the following ways:

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