

A NEW ERA OF SMARTER FOOD SAFETY



Wisconsin Association for Food Protection – November 2019

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GOOD AFTERNOON !!!



JUNE - 12 - 2002

JANUARY - 4 - 2011

APRIL - 30 - 2019

- Overview
- **Tech-enabled Traceability & Foodborne Outbreak Response**
- **Smarter Tools and Approached for Prevention**
- **New Business Models and Retail Modernization**
- **Food Safety Culture**
- **Next Steps**



FDA Public Meeting

A New Era of Smarter Food Safety



FDA U.S. FOOD & DRUG
ADMINISTRATION

- **Statement – 4/30/19**
- **Public Meeting – 10/21/19**
- **Hilton Washington DC/Rockville Hotel**
- **30 Speakers from industry and government**
- **1,200 attendees (registered) – 300 at event**

FDA Public Meeting

A New Era of Smarter Food Safety



FDA U.S. FOOD & DRUG
ADMINISTRATION

➤ Focus & Feel

- Gather information
- Discuss hurdles and best practices
- Collaboration
- Develop Blueprint

FDA Public Meeting

A New Era of Smarter Food Safety



FDA U.S. FOOD & DRUG
ADMINISTRATION

➤ **Structure**

- **Opening Remarks**
- **Visions for a New Era of Smarter Food Safety**
- **FDA Moves Forward into a New Era**
- **Breakout Sessions**

FDA Public Meeting

A New Era of Smarter Food Safety



FDA U.S. FOOD & DRUG
ADMINISTRATION

➤ **Structure**

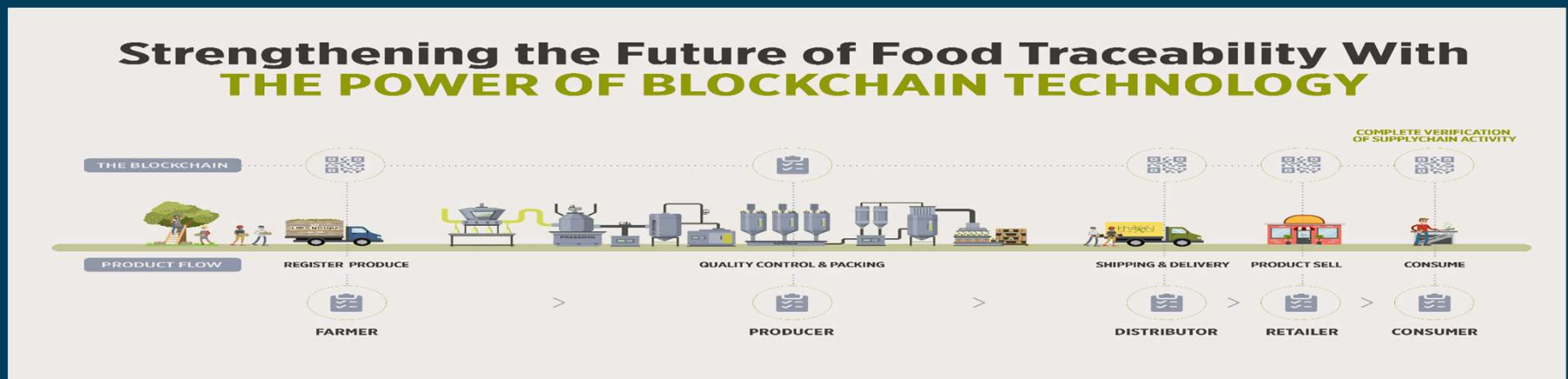
- **Lunch**
- **Perspectives on a New Era of Smarter Food Safety**
- **Open Public Comment**
- **Breakout Summary Reports**

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TECH ENABLED TRACEABILITY AND FOODBORNE OUTBREAK RESPONSE

- *“Looking at technologies, data streams and approached that will greatly reduce the time it takes to trace the origin of a contaminated food.”*
- Facilitate End-to-End Traceability Throughout the Food Safety System
- Enhance Foodborne Outbreak Response
- Innovate Communications Approaches



FACILITATE END-TO-END TRACEABILITY

- *Develop foundation components needed to make full traceability systems operational.*
 - What data elements and processes are needed for full traceability?
 - Develop strategies to harmonize tracing activities by engaging public and private partners.
- *Encourage industry/company adoption of new technologies*
 - Develop ways to achieve interoperability of traceability systems.
 - Identify and develop incentives to maximize voluntary adoption.
 - Promote research and innovation through the establishment of mechanisms to promote shared development of technologies.

ENHANCE FOODBORNE OUTBREAK RESPONSE

- *Enhance Outbreak Detection*
 - Advance efforts to mine data in order to identify early signals of outbreaks (website and online reviews of retailers, social media).
 - Explore mechanisms to better leverage industry insights to identify possible outbreaks, potentially utilizing third parties to gather and analyze data.
- *Enhance Outbreak Response Activities*
 - Explore new models and approaches for domestic and international outbreak response (training, WGS matching, collaboration).
 - Making greater use of outbreak information from other countries to prevent contaminated foods from entering the United States.

INNOVATE COMMUNICATIONS APPROACHES

- *Spark New Dialogue Around Traceability*
 - Create forums for dialogue involving interested stakeholders to address needs and overcome current obstacles for full traceability.
 - Develop communications around traceability.
- *Enhance Outbreak Response Activities*
 - Create a (USG) app for alerting industry and consumers of recalls and outbreaks.
 - Support development of scannable labels and associated apps to give product information through the supply chain and information on recalls/outbreaks.

WHAT DOES THIS MEAN?

- *End-to-End Traceability*
 - Data, cooperation and trust are key!
- *Enhance Foodborne Outbreak Response*
 - Analyze data better and faster (international and domestic)!
- *Innovate Communications Approaches*
 - Communicate best practices and apps!

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SMARTER TOOLS AND APPROACHED FOR PREVENTION

- *“Looking at new tools, processes, and communications to information our prevention efforts.”*
 - Invigorate Root Cause Analysis
 - Redefine Data and Data Analytics for Responding to and Preventing Conamination
 - Develop Innovative Approached to Inspection and Compliance
 - Foster Forward-Thinking Communications for Industry Prevention Efforts

ROOT CAUSE ANALYSIS (RCA)

INVIGORATE ROOT CAUSE ANALYSIS

- *Develop new models for conducting root cause analysis.*
- *Improve the standardization of methodologies and guiding principles, including reporting and communication.*
- *Enhance agency readiness for quick deployment of food safety experts to conduct root cause analysis.*
- *Conduct outreach on lessons learned through root cause analyses and through Big Data or Artificial Intelligence on inspections and sample findings.*
- *Work with industry to use food safety data to identify best practices in a non-regulatory framework.*

REDEFINE DATA AND DATA ANALYTICS FOR RESPONDING TO AND PREVENTING CONTAMINATION

- *Use artificial intelligence and other technologies to scan external information (both public and private).*
- *Expand how FDA mines data in evaluate inspections and sampling findings.*
 - Move to descriptive analytics to predictive analytics.
 - Explore public/private partnerships to perform predictive analytics to identify potential risks
- *Encourage industry to adopt tools building on traceability to better protect consumers.*

DEVELOP INNOVATIVE APPROACHES TO INSPECTION AND COMPLIANCE

- *Evaluate the feasibility of conducting remote, virtual and component inspections of foreign and domestic firms with a demonstrated history of compliance.*
- *Consider establishing a voluntary program for domestic facilities and farms that submit to audits certification bodies accredited under FDA's Third-Party Program.*
- *Further assess the utility of third-party audits as a tool.*
- *Encourage industry use of real-time, remote monitoring of conditions on farms and facilities.*

FOSTER-FORWARD THINKING COMMUNICATIONS FOR INDUSTRY PREVENTION EFFORTS

- *Enhance communications on compliance trends to encourage firms to self-correct potential food safety concerns.*
- *Enhance communications on trends in top risk factors for food contamination identified during outbreaks.*
- *Promote education and training to communicate lessons learned from contamination events and how they should inform future preventive controls.*
- *Publicly share data so that others can use the information.*

WHAT DOES THIS MEAN?

- *Invigorate RCA*
 - New model for RCA and share information!
- *Redefine Data*
 - Big Data, AI and Predictive Analytics
- *Innovate Approach to Inspection/Compliance*
 - Real-time, remote monitoring – virtual audits
- *Forward Thinking Communications*
 - Share data and communicate

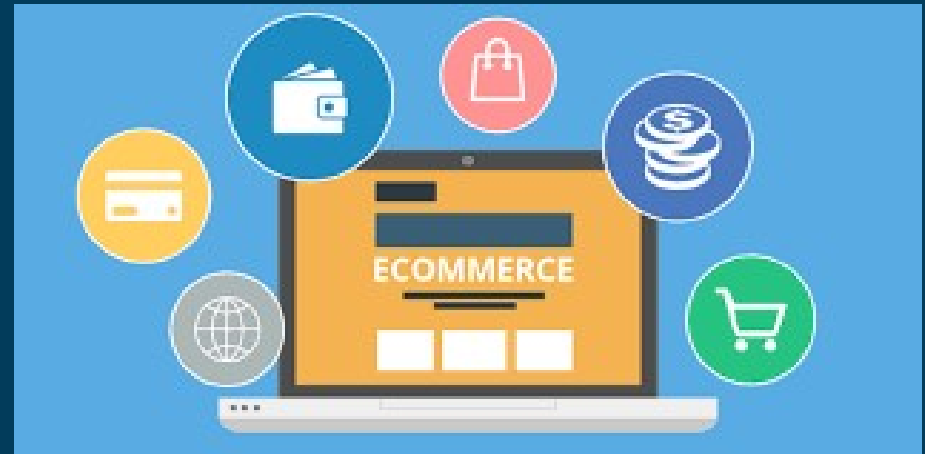
Intermission

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NEW BUSINESS MODELS AND RETAIL MODERNIZATION

- *“Advancing the safety of both new business models, such as e-commerce and home delivery of foods, and traditional business models, such as retail food establishments.”*
 - Develop Approaches to Ensure the Safety of E-Commerce
 - Enhance Traditional Retail Food Safety
 - Navigate the Last Mile



DEVELOP APPROACH TO HELP ENSURE THE SAFETY OF E-COMMERCE

- *Work with industry to study new business models to identify current vulnerabilities and gaps in safety.*
- *Identify standards of care based on risks and existing/emerging business models.*
- *Establish regulatory framework.*
 - *Rapid evolution of business models – how to handle?*
 - *Add section of Food Code (or issue guidance) for industry around handling, packaging, transportation of meal-kits.*

DEVELOP APPROACHES TO HELP ENSURE THE SAFETY OF E-COMMERCE

- *Incentivize the use of technology that automatically monitors product time/temperature/tamper resistant traceability information.*
- *Meet with online retailers to better understand their third-party seller models and develop new methods to ensure recalled product is pulled from the marketplace.*
- *Foster partnerships with influencers to make smarter food safety a part of the national dialogue.*
- *Partner with food delivery companies on how to handle food properly.*

ENHANCE TRADITIONAL RETAIL FOOD SAFETY

- *Expand the Food Code to require industry food safety management system for retail establishments.*
- *Enhance the Retail Risk Factor study to measure the occurrence of practices and behaviors known to contribute to foodborne illness outbreaks among different foodservice and retail food operations.*
- *Develop protocols for retail facilities that have repeated violations and outbreaks.*
- *Improve training curriculum for federal, state, local, tribal and territorial regulators and staff.*
- *Increase engagement with industry and regulatory partnership groups to promote implementation of effective intervention strategies.*

NAVIGATE THE LAST MILE

- *Crowd-source ideas on developing industry standard of care based on different business models.*
- *Develop best practices for “last mile” food delivery.*
 - *Address ownership of the food during the last mile.*
- *Enhance industry and consumer education on the TTTC (temperature, time, tamper resistant, cross-contamination)*

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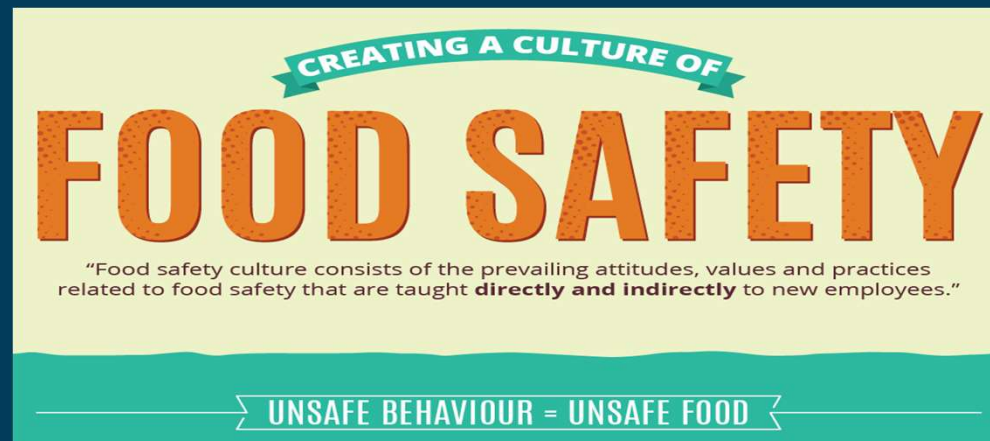
- *E-Commerce*
 - New model for RCA and share information!
- *Enhance Traditional Retail Food Safety*
 - Big Data, AI and Predictive Analytics
- *Navigate the Last Mile*
 - Real-time, remote monitoring – virtual audits

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FOOD SAFETY CULTURE

- *“Supporting and strengthening cultures that embrace food safety within FDA, on farms and in facilities.”*
 - Strengthen FDA’s Approach to Recognizing the Critical Importance of Food Safety Culture and Behavior Change in the Agency’s Work Processes
 - Promote Food Safety Culture Throughout the Food System
 - Develop Smarter Food Safety Consumer Education



STRENGTHENING FDA'S APPROACH TO FOOD SAFETY CULTURE AND BEHAVIOR CHANGE

- *Ensure consideration of the role of culture as a central tenet in advancing the agency's food safety mission.*
 - *Develop procedures to further strengthen the internal understanding of food safety culture.*
 - *Conduct internal assessment and metrics for food safety culture.*
- *Encourage FDA leadership to communicate the importance of Food Safety Culture as part of FDA's Foods program.*

STRENGTHENING FDA'S APPROACH TO FOOD SAFETY CULTURE AND BEHAVIOR CHANGE

- *Update staff training and rotational opportunities to ensure they focus on reducing food safety risks as primary responsibility for staff to accomplish the goal of preventing foodborne illness.*
- *Research how inspection might be modified to be used as a tool to strengthen and gauge food safety culture in regulated industry.*
 - *Train investigators on assessing and promoting food safety culture in facilities.*
 - *Educate while we regulate 2.0: encourage industry responsibility, not just accountability, for food safety.*

PROMOTE FOOD SAFETY CULTURE THROUGHOUT THE FOOD SYSTEM

- *Develop a Food Safety Culture Campaign to foster new external dialogue on the importance of food safety culture and best practices.*
- *Develop education, training, and tools to foster and advance industry best practices.*
- *Review existing literature and conduct additional research on challenges, barriers, and opportunities to influence attitudes, behaviors and adopt food safety culture.*
- *Update FDA's policies and procedure to facilitate industry efforts to adopt food safety culture.*
- *Enhance food safety culture efforts with partners.*

DEVELOP SMARTER FOOD SAFETY CONSUMER EDUCATION

- *Develop a consumer-focused initiative to help consumers create a smarter food safety environment in their daily lives for themselves and their families.*
 - *Target educational materials to populations that may have the greatest need for food safety education.*
 - *Target educational materials to focus on emerging food safety concerns.*
- *Research and test consumer messaging materials.*
- *Work with a variety of partners to promote consumer messaging.*
- *Develop strategies to help consumers access, understand and utilize new technologies relevant to food safety*

WHAT DOES THIS MEAN?

- *Recognize FSC & Behavior Change*
 - Educate & Regulate Food Safety Culture
- *Promote FSC Throughout the Food System*
 - Collaborate & Best Practices
- *Develop Smarter Food Safety Consumer Education*
 - Consumer Messaging & Education = Critical!

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➤ Next Steps

➤ **Public Comments - Ends November 20, 2019**

➤ **Docket Number: FDA-2018-N 4187**

<https://www.fda.gov/food/food-industry/new-era-smarter-food-safety>

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➤ Next Steps

- **FDA to create Blueprint**
- **IDFA is collecting public comments**
- **Assess your facilities**
- **Assess your food safety culture**

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THANK YOU!