



Introduction to Produce Traceability Initiative

Food Safety & Traceability for
December 17, 2009

Agenda

- Introduction
- Review of Food Safety & Traceability
- Review of PTI
- Review of Food Safety Legislation
- Overview of KPG Offering
- Closing Thoughts
- Q & A



Introduction

KPG Participants

- **Angela Paymard- CEO**
 - Member, National Supply Chain, Logistics & Technology Council
- **Ernesto Nardone- COO**
 - 22 yr IBM Supply Chain expert
- **Cathy Elliott- Senior VP Operations**
 - 22 yr Agribusiness Industry Expert
- **Jackie Williams- SME**
 - 20 yr Supply Side Industry Expert
- **Ole Mygind- SME**
 - 20 yr HACCP Compliance Expert
- **Kris Long- SME**
 - 12 yr Supply Side Compliance Expert



Food Borne Illness

What is Food Safety Important?

The Faces of Food Safety: Kyle Allgood & Linda Rivera

- Two-year-old Kyle Allgood fell ill after consuming fresh spinach. On Sept. 20, 2006, within hours of being transferred by plane to a hospital in Salt Lake City, Kyle developed hemolytic uremic syndrome, a type of kidney failure caused by *Escherichia coli* bacteria, and suffered a fatal heart attack.



- In May 2009, seven days after eating tainted cookie dough, Linda Rivera, a teacher's aide, went into septic shock infected with *E. coli* O157:H7. Her kidneys had failed. Doctors removed her gallbladder and part of her colon. Then her liver shut down. It is unclear exactly what is causing her loss of speech, although the toxin produced by the *E. coli* O157:H7 bacteria can attack the brain. Today, she is fighting to stay alive. Michael Gross, a kidney specialist who has treated Rivera says, "The chances of her coming out of the hospital and getting into a normal life cycle are low."



Over 700 Recalls YTD in 2009

900 Recalls in 2007 and 2008

Produce outbreaks:

- **1400+ illnesses: hot peppers/tomatoes**
- **51 illnesses: cantaloupe**
- **3 deaths, 200 sick: bagged spinach**
- **183 illnesses: tomatoes**
- **80 illnesses: lettuce**
- **70 illnesses: lettuce**



Industry Compliance

Traceability
Vs.
Food Safety



Traceability

Traceability Defined

- *Traceability: Custody Chain of a Physical Object*
- **Internal Traceability** = confidential or proprietary data and processes companies use within their own span of operations to track/trace product.
- **External Traceability** = the data exchange and business processes that take place between trading partners to track/trace product.
- **Whole-Chain Traceability** = Internal + External traceability.

Bioterrorism Act of 2002

- U.S. Congress passed the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 ("the Bioterrorism Act").
- This federal law requires 1 up and 1 down traceability
- The purpose of the Bioterrorism Act is to allow the Food and Drug Administration (FDA) and other authorities to quickly determine the source and cause of any deliberate or accidental contamination of food.
- This Act allows the FDA to identify these sources through information provided by registered food facilities prior to entry of food and beverages for human and animal consumption, including alcoholic beverages and chewing gum, into the U.S.

Produce Traceability Initiative

- “PTI”
- Sponsored by PMA, CPMA and UFPA
- 6 additional participating trade associations
 - FMI, NGA, NRA, IFDA, CCGD, CHC
- Many participating companies including:
 - 11 Foodservice Companies (U.S. Food Service, SYSCO, etc)
 - 15 Retailers (Wal-Mart, Kroger, SuperValu, etc)
 - 22 Growers/Shippers
- PTI Steering Committee formed to help create guidelines & milestones from a “bottom up” perspective

PTI Goal

To create an Action Plan for the produce industry to adopt an effective whole chain traceability program by incorporating the use of technology and use of common standards to serve as linkages between internal traceability programs.

PTI Milestones

1. Brand Owners to Obtain GS1 Company Prefix (Q1 2009)
2. Brand Owners to Assign GTIN's (Q1 2009)
3. Brand Owners to Provide GTIN's to Trading Partners (Q3 2009)
4. Brand Owners to Place Human Readable Information on Cases (Q3 2010)
5. Brand Owners to Encode Case Information into a Barcode (Q3 2010)
6. Handlers to Read Inbound Case Information from Brand Owners (2011)
7. Handlers to Read and Store Information on Outbound Cases (2012)

PTI Milestones

- ~~1. Brand Owners to Obtain GS1 Company Prefix (Q1 2009) — **DONE**~~
- ~~2. Brand Owners to Assign GTIN's (Q1 2009) — **DONE**~~
- ~~3. Brand Owners to Provide GTIN's to Trading Partners (Q3 2009) — **DONE**~~
4. Brand Owners to Place Human Readable Information on Cases (Q3 2010)
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Growers will need to have case labels ready by Q3 2010

PTI Compliance

To minimize the impact on businesses by:

- Using existing standards
- GS1
- Using existing technologies
- Barcodes
- Using existing information
- Identification number
- Lot #
- Pack/Harvest date (OPTIONAL if Lot # is unique by pack or harvest date)
- One-step-up, One-step-down

Outcome

Agreed on creation of Best Practices

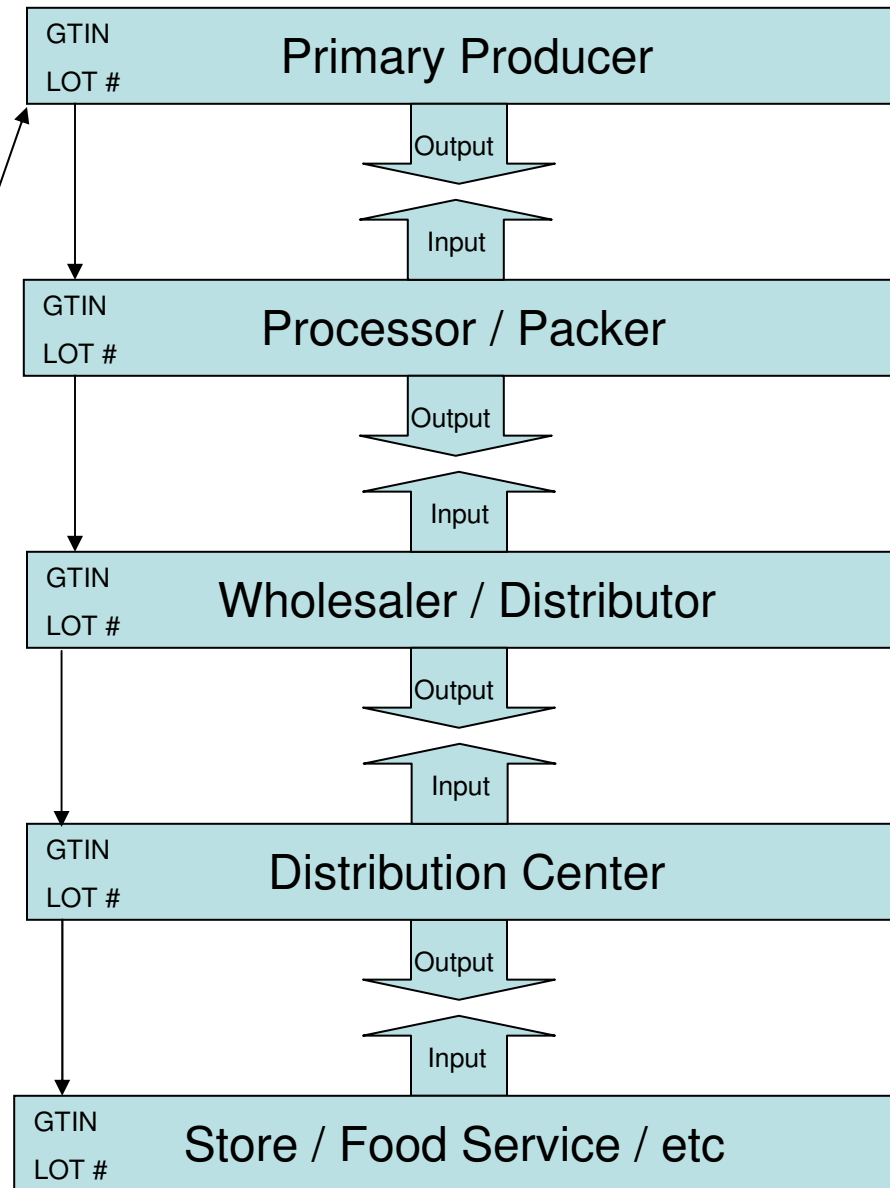
- Case labeling
- Pallet labeling
- Data Synchronization
- Outbound Capture of Information

Use The Case: Lowest Common Denominator

ALL supply chain partners touch the case



GTIN: (01) 533925 00001 6
LOT#: (10) 267A1156



Barcodes

- Most every distribution center uses barcodes
- Most barcode scanners are linear scanners
- GS1 128 barcode is a linear barcode
- Holds up to 48 characters
- Needed for automated capture of traceability information



Food Safety

Food Safety Management Defined

- *Preventative* measures to assess risk of foodborne illness within the supply chain
- Food Safety includes standards such as:
 - HACCP
 - ISO 22000:2005
- Food Safety Management is concerned with ambient issues:
 - Clean Floors
 - Sterilized Tools
 - Pest Free Environment
 - Temperature Controls
 - Hand Washing
 - And More.....

HACCP

- Hazard Analysis and Critical Control Points
- Developed by NASA to manage their internal safety procedures in a mission critical environment
- HACCP Compliance is used across many industries to denote the highest safety standards

HACCP principles

1. **Analysis of the potential risks** affecting the safety of foods.
2. Identification of the **critical control points** (CCPs) where these risks can be tested, measured and then eliminated or reduced.
3. Establishing **critical limits** for all measurements.
4. Deciding the **monitoring activities** that are required and then collecting data according to a HACCP plan.
5. Establishing **corrective actions** to be taken if there is a deviation from the permitted critical limits.
6. **Documenting all steps** from risk analysis to activity plans and the actual controls and measurements performed.
7. Establishing procedures to **verify** that the system works as intended.

Legislation in Process

- Food Safety Modernization Act of 2009
 - Establish the Food Safety Administration within the Department of Health and Human Services
 - Protect the public health by preventing food-borne illness, ensuring the safety of food, improving research on contaminants leading to food-borne illness, and improving security of food from intentional contamination, and for other purposes.
 - STATUS: Referred to the House Subcommittee on Livestock, Dairy, and Poultry.
- Food Safety Enhancement Act of 2009
 - Registration of food facilities.
 - Hazard analysis, risk-based preventive controls, food safety plan, finished product test results from category 1 facilities.
 - STATUS: Passed in House
- And More.....

Food Safety is all about...

What

- Knowing your **risks**
- Getting **everyone** involved
- **Proving** that you are in control
- **Improving**

Only in theory can this be achieved using generic tools ... not to speak of pen and paper

How

- ➔ • Perform risk analysis – again and again
- Establish procedures and controls
- ➔ • All employees must know their responsibilities through training and timely access to relevant information
- ➔ • Monitor your production and processing
- Register the measurements
- Analyze results and adjust

In the real world you need technology specifically designed for food safety

The Low Hanging Fruits Of Food Safety Management

- Potentially **take out 25% - 50% of the entire cost** of food safety management by using Food Safety Manager to create **a company-wide central food safety management system**.
- Significant potential resource **savings in case of a recall situation** by minimizing effort to determine recall scope.
- **Greater certainty of compliance**: automatic creation of necessary documents from data in database which reduces errors and redundancy
- **Higher customer satisfaction**: Offer the same tailored documents and structure for each client (e.g. retail) regardless of own manufacturing location and/or country. Meet specific requirements and standards easily
- **Automatic, reliable data collection** using integrations and handheld devices
- **Active use of quality information** for:
 - Preventive measures,
 - Management information,
 - Statistics to support sales,
 - **Substantiating credence claims**

Introduction to PTI Compliance

How this Affects You

Key Issues to Handlers of Fresh Produce

- Protecting Your Brand
- Ability to Quickly Vindicate the Company's Brand
 - Reduces Negative Public Attention
- Improved Visibility Of The Internal Custody Chain
- Improved Real Time Reporting
- Faster Retrieval of Information related to Recalled Product

Introduction to PTI Compliance

KPG's Offering

KPG's Certifications

- HACCP Manager Certification
- ISO 22000 Implementation Certification
- Certified ServSafe Manager Certification
- Certified Food Handler Certification

Expertise Coming Soon.....

ISO 22000 Auditing

Licensed SQF Consultant: Implementing (Safe Quality Food) SQF 1000 (Growers) and 2000 (Manufacturers) Systems

Licensed SQF Certification Body

Implementing British Retail Consortium or "BRC" Global Standards (Certification)

Audit GFSI (Global Food Safety Initiative) approved BRC standards

PTI Compliance in KiSS Application

- 1. KPG's PTI Compliant Solution involves GTIN and Lot # at the CASE LEVEL**
- 2. GTIN is included within**
 - a. Purchase Orders**
 - b. Global Sourcing**
 - c. Packout Entry**
 - d. Order Processing**
 - e. Diverted Orders / Pallet Ticket Processing**
- 3. Lot Number Can Be**
 - a. The Source Number**
 - b. Algorithm**
 - c. Lot Number**
- 4. Reporting**
 - a. Complete Catalog of Reports based on GTIN, Lot #, Sales Order Number, Transportation, and Customer**

KPG's "Umbrella" for ALL Client Divisions

- KPG's *KiSS* application can sit as a data repository for all divisions to capture and centralize all case level information for PTI compliance
- Utilizing KPG's *KiSS* application, Clients would be PTI Compliant ahead of the Q3 2010 deadline
- Reporting would thereby come from KPG's reporting system and reduce Client's time to execute across all business units

PTI Consulting

- KPG can assist Client with the process of becoming PTI compliant across all divisions
- This includes
 - Education
 - Training
 - Business Process Optimization

Closing Thoughts

- Food Safety Management and PTI Compliance is an important objective for Clients
- KPG's *KiSS* application will help Clients become PTI Compliant across all divisions
- KPG's Offers PTI Consulting Assistance to ensure Clients Smooth Transition to this important standard



Thank You!

For More Information, Please Contact:

Angela Paymard at marketing@kirkey.com

Most Dangerous Microbes

Name	<u>Where is it found?</u>	<u>Disease/Result</u>
Salmonella	Raw meats, poultry, dairy products, vegetables and fruits	Nausea, vomiting, diarrhea, fever
E.Coli O157:H7	Raw and undercooked ground beef, other red meat, unpasteurized milk, soft cheese, fresh fruit and vegetables	Abdominal pain, cramps, nausea, vomiting, diarrhea, occasional fever

Most Dangerous Microbes

Name	<u>Where is it found?</u>	<u>Disease/Result</u>
Norovirus	Fecal matter on any kind of food and can withstand most disinfectants and hot and cold temperature	Nausea, abdominal pains, vomiting, diarrhea
Listeria	Raw and undercooked meat and produce, unpasteurized milk, soft cheese	Fever, nausea, muscle aches diarrhea.