



Q&A: Produce Traceability Initiative

The produce industry is committed to food safety – the health and confidence of our customers is at stake. Enhancing our industry’s current traceability capability to achieve whole chain, electronic recordkeeping will allow government and industry to work better together to remove suspect product from the marketplace, while limiting the scope and cost of recalls to our industry. That vision necessitates the ability to trace product through the supply chain, from the field forward.

The following Q&A is intended to offer insight into why an enhanced traceability capability is needed, the Produce Traceability Initiative’s vision for chain-wide, electronic traceability at the case level, and why industry shouldn’t wait for government to act.

[Can produce be traced today?](#)

[What is the produce industry doing to improve produce traceability?](#)

[What solution has been identified?](#)

[What are the common pieces of information needed for this process?](#)

[How does this traceability process work?](#)

[Why aren’t we doing traceability this way now?](#)

[Why isn’t having an internal traceability system enough?](#)

[Why trace at the case level?](#)

[What are the benefits of this traceability process?](#)

[What is the Produce Traceability Initiative?](#)

[What are the costs involved in implementing the PTI?](#)

[Do we have to certify our labels as PTI-compliant?](#)

[What are the penalties for not meeting the PTI’s 2012 target date?](#)

[Why not wait for Congress and FDA to develop traceability regulations?](#)

[What’s next for the PTI?](#)

Can produce be traced today?

The U.S. Bioterrorism Act of 2002 requires that every handler of food products keep records documenting movement of its products both one step forward and one step back – that is, to document where the product was sourced, and where it was shipped. These records allow product to be traced throughout the supply chain today, but we recognize that the current system isn’t perfect and we are working to improve it.

[Back to top](#)

What is the produce industry doing to improve produce traceability?

Current traceability systems are generally effective for tracing product within a specific company’s operations – that’s known as internal traceability – and the industry’s major trade associations have been working to enhance that capability by identifying and disseminating best practices for many years. The Produce Traceability Initiative (PTI) builds on that current capability by establishing a common framework and nomenclature for product identification, to provide streamlined connectivity across the

supply chain. The PTI is facilitated by industry leaders, and staffed by industry and association volunteers (see “[What is the PTI?](#)” below.)

[Back to top](#)

What solution has been identified?

The PTI’s vision is to achieve standardized, electronic (computerized) traceability across the supply chain. Recognizing that each handler in the supply chain already has its own internal traceability system, the initiative’s solution calls for adapting those systems to track two common pieces of information on every case of produce as the case moves through each link in the supply chain – i.e., external traceability.

Here’s an analogy to explain internal vs. external traceability. Federal Express and UPS track packages effortlessly around the world using unique electronic codes that identify and track each package as it moves throughout their distribution system. FedEx scanners can’t read the codes on a UPS package and vice versa; each company has its own internal coding system. Produce is slightly different because our products are not handled in a closed-loop system like FedEx’s or UPS’s systems; produce distribution can involve many players, including packers, repackers, wholesalers or distribution centers, retailers and foodservice. Produce therefore needs a case coding solution that can be read by any company across that supply chain, that is linked by common information, and that is retained electronically by all the companies handling the package.

[Back to top](#)

What are the common pieces of information needed for this process?

The information to appear on each and every produce case is: (1) a Global Trade Item Number (GTIN), which will identify who the “manufacturer” is (i.e., the owner of the brand that appears on the product case) and the type of product inside that case; (2) a lot number specifically identifying the lot from which that produce came. This information will appear in both human-readable form and in a machine-readable GS1 barcode. The GS1 barcode provides each trading partner in the supply chain the ability to scan and maintain the encoded information in each trading partners’ computer systems. The GTIN is a globally unique product identification number based on GS1 global standards. These standards are time-tested and market proven product identification standards, having been used in grocery stores for more than 35 years in the form of Universal Product Code (UPC) barcodes.

[Back to top](#)

How does this traceability process work?

Once each handler of the product is given these two pieces of information – the GTIN and lot number – they can search their own internal traceability systems to retrieve the necessary information about the path of that case, one step forward and one step back. The Produce Traceability Initiative does not create a centralized database to hold all the data for the entire supply chain. However, each member of the supply chain will be able to track these two fields in their individual databases and quickly determine where the produce came from, and where it was shipped.

[Back to top](#)

Why aren’t we doing traceability this way now?

While the grocery industry has had it for many years in the form of UPCs, electronic traceability has been more difficult to achieve in the more diverse world of fresh foods such as produce. However, the modern reality of today’s food safety environment now demands that the produce industry move from old paper traceability systems to be able to rapidly trace back products electronically, as advances in

technology allow. North American produce industry leaders recognized this reality and began developing traceability best practices in 2002 and, working with others from around the globe, later established a global guide for the implementation of produce traceability (the *Global Fruit and Vegetable Traceability Implementation Guide*, accessible via the [PTI website](#)). In 2007, the Produce Traceability Initiative was established to develop best practices to implement traceability as captured in the global guide and which reflect the realities of the North American marketplace – including the need for electronic traceability throughout the produce supply chain.

[Back to top](#)

Why isn't having an internal traceability system enough?

Achieving chain-wide, electronic traceability will aid the Food and Drug Administration's (FDA) traceback investigations in the event of a foodborne illness outbreak. The goal is to identify and remove suspect product from the marketplace as soon as possible to safeguard public health. At the same time, product not implicated in an outbreak can stay on the market, and business can return to "normal" as soon as possible.

[Back to top](#)

Why trace at the case level?

The shipping case (which can be a carton, bin, tote, etc.) is the common denominator; everyone in the supply chain handles the case, whereas the individual item in the case is only handled by a few. So it is most efficient to code and track the case. Further, we need to walk before we can run; case coding is easier to achieve than item coding. It also would take a significantly higher investment to implement item-level coding, and yet it would be more operationally inefficient.

[Back to top](#)

What are the benefits of this traceability process?

- Enhance and maintain the confidence of consumers and government, supporting industry's commitment to food safety.
- Limit the scope and cost of recalls to suspect product only, providing a return on the industry's investment by allowing non-implicated product to remain in distribution and on store shelves so the impact to the specific product in the marketplace is greatly reduced.
- Investigations can occur more efficiently, expediting tracking while minimizing business disruptions and costs.
- Companies can keep their own internal traceability systems while modifying them to achieve external traceability by including the GTIN and lot number, which allows trading partners to "talk the same language" about produce items.
- The information can be stored electronically throughout the supply chain, permitting electronic searching and analysis that will produce answers more quickly.
- From an operational standpoint, product information is consistent across the industry and around the world.

[Back to top](#)

What is the Produce Traceability Initiative?

Canadian Produce Marketing Association, Produce Marketing Association, and United Fresh Produce Association formed the Produce Traceability Initiative (PTI) in 2007 to help produce companies and their buyer partners to move toward achieving whole-chain traceability. The initiative was initially guided by a steering committee of more than 50 produce retailers, wholesalers, distributors, packer-shippers and

growers. An action plan developed by that committee identified seven milestones to achieve whole-chain, electronic traceability by 2012. GS1 US joined the initiative's administering organizations in 2010. That same year, a volunteer-led Leadership Council whose members hail from across the supply chain was formed to direct the initiative's activities moving forward. Industry working groups were also formed to guide development of best practices, conduct pilot studies to address barriers to implementation, and to communicate transparently with supply chain members.

[Back to top](#)

What are the costs involved in implementing the PTI?

First, consider that the public health, consumer confidence and economic costs of *not* implementing the PTI significantly outweigh the costs of doing it. Being able to remove suspect product from the marketplace, while narrowing the scope of a recall to only suspect product and not all production, protects public health while minimizing impacts on the marketplace.

Most companies should already be tracking the traceability information needed by the PTI action plan, to comply with the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (aka the "bioterrorism act"). So the costs to move to electronic recordkeeping, if needed, are incremental and will vary from company to company. For example, a company that is already using barcode readers in their warehouses as part of their logistics systems will face substantially lower costs than a company that is keeping paper records. PTI's working groups began conducting pilot studies in 2011 to help define and minimize implementation costs; many companies are well down the path of implementation and their experiences can be of tremendous assistance to others. Particular attention is being given to the needs of the small businesses that are the backbone of our industry.

[Back to top](#)

Do we have to certify our labels as PTI-compliant?

Certification is not required for case and pallet labels defined by the PTI. However, it is recommended that you send a sample label to each of your trading partners to ensure they can read your labels on their equipment. Technology and solution providers who want to validate their GS1-128 barcodes are constructed properly for readability, may want to submit their generated barcode to the GS1 US Verification Services program for a nominal fee of \$25. This service provides a 4-8 page report on the structure and readability of the barcode submitted. Or if your organization is located outside of the United States, you may contact your local GS1 office to inquire about the services offered for GS1 barcode verification.

What are the penalties for not meeting the PTI's 2012 target date?

As a voluntary initiative, it is up to each individual company and its trading partners to determine if and/or when to implement the PTI. The PTI Leadership Council recognizes that numerous factors will influence that decision; some companies will be early adopters, others will implement the action plan on schedule, others will be late adopters, and some companies might not adopt it at all. Each company will be driven by their particular marketplace considerations.

[Back to top](#)

Why not wait for FDA to develop traceability regulations?

There are several key reasons why industry shouldn't wait to implement the PTI:

- **FDA encouraged the produce industry not to wait:** FDA Deputy Commissioner for Foods Mike Taylor encouraged industry not to wait to adopt enhanced traceability, speaking to the PTI Leadership Council in May 2011: "We are keenly aware that industry has been at the forefront of

understanding traceability, and in order to make progress we know we are going to need to build on and embrace the work that industry has done... When real progress is being made, we encourage that and we don't want our process to be an obstacle."

- **Industry should lead, not follow:** It behooves the produce industry to work together to find real-world solutions, to demonstrate leadership to stakeholders including consumers and government, rather than having the industry's business be driven by others who may not understand the produce sector.
- **The new food safety law doesn't offer specifics:** While the Food Safety Modernization Act of 2010 does contain language mandating traceability and recordkeeping, the law speaks in generalities. For example, it doesn't define what a traceability system should look like – instead, the law directs FDA to conduct research and pilot tests. Similarly, remember country of origin labeling (COOL)? That law didn't define the specifics of how COOL should be achieved, that was decided and implementing regulations were developed by the U.S. Department of Agriculture. Now it is up to FDA to develop regulations to implement FSMA, including the law's requirement for electronic recordkeeping. It will be some time – many months to years – before those implementing regulations are in place and go into effect.
- **PTI offers the best model to follow:** During FDA's FSMA implementing rulemaking process, industry will have numerous opportunities to provide input on what those rules should contain – and to show a cost-effective, working traceability system such as the PTI. PTI is already considered the model to follow by other fresh food industries that are concurrently working to adopt standardized traceability. Electronic recordkeeping featuring standardized product identification are central elements of the PTI, and the GS1 product identification standards and bar codes used by the PTI are recognized, market-proven global standards.
- **We can't afford to wait:** But most importantly, the produce industry simply cannot afford another large foodborne illness outbreak, or an act of terrorism. The public health and economic costs are too high, and consumer confidence in the safety of fresh produce has already suffered too much. Industry must move now to restore consumer confidence in the safety of produce, every bite, every time.

[Back to top](#)

What's next for the PTI?

In late 2009, an industry survey was conducted to benchmark the progress of PTI implementation, and to learn more about barriers to implementation. Survey respondents cited costs as a primary barrier, and made it clear more transparency and information were needed. In response, the PTI leadership structure was overhauled in 2010. It was expanded to include greater supply chain-wide representation, including more buyer representation from retail and foodservice. Volunteer-led working groups are developing best practices and, perhaps most importantly, conducting pilot studies to address implementation needs and determine the costs to do so. A communications working group is developing new tools for keeping the industry informed. For the latest news and information, visit

www.producetraceability.org.

[Back to top](#)