

Traceability

“Traceability (Traceback)” is the ability to track watermelons including fresh produce, back to their original source. This cannot prevent the initial food borne outbreak, but it may help speed up the process to pinpoint the source. The faster the source is located the faster the rest of the watermelon industry can get back to normal. Hopefully, this will help ensure that the public will have greater confidence in the watermelon industry.

A written procedure must be included in the Grower’s Standard Operating Procedure Manual on how watermelons can be tracked back to the original source, and where it went when it left the farm. Maintain as many detailed records as possible including the harvesting dates, specific field and product location within the field, watermelons within a lot, packing and shipping date and harvesting crew. Each watermelon must contain some type of identification to maintain its integrity throughout the harvesting and marketing process. The label is sufficient to trace the watermelon to the farm or packing house, but each watermelon shipment must have a date stamped or code with the date incorporated on the box and also on the documentation. Placing a label on the wrapped pallet, carton or bin will not meet this standard because of commingling of product at point of purchase. If packing in more than one shed or packing under someone else’s label, additional identification is needed to be able to trace watermelons back to the packing house and farm.

Recall procedures must be included in the Grower’s Standard Operating Procedure Manual. Mock recalls should be scheduled at least every six months to ensure the system works properly. The farm must document the customers contacted, the amount of watermelons remaining from the original shipment and the disposition of watermelons which could not effectively be recalled. This may include sales to customers or reshipment to other customers who could be contacted if necessary.

A system to identify the source of watermelons cannot prevent the occurrence of a microbiological hazard that may lead to an initial outbreak of foodborne disease. However the ability to identify the source of a product through traceback can serve as an important complement to good agricultural and management practices intended to prevent the occurrence of food safety problems. Information gained from traceback investigation may also be useful in identifying and eliminating a hazardous pathway.

Overview of the Traceback Process

When an outbreak is identified, public health officials:

- Conduct scientific studies to determine common food items that were consumed during the period of infection for the pathogen.
- If a particular food product is identified and other contributing causes such as cross-contamination, ill food workers, etc., are ruled out.
- Obtain the following information about the suspected product from the establishment where the product was sold or processed:
 - Product type
 - Packaging
 - Labeling
 - Lot number
 - When the product was sold
 - When the product was received
 - When the stock was rotated
 - Inventory
 - Handling and shipping procedures
- Records that reflect the entire shelf life of the implicated product are collected about suppliers and shipments to the establishment
- Distribution data is analyzed using lot numbers to identify suspected shipments that fit the proper time frame
- Distributor interviews, data collection and analysis for each level of distribution are repeated until the source of contaminated produce is determined.

Lot numbers and grower identifications are not always used or recorded on shipping records, so it is often difficult to pinpoint the cause of an outbreak. There can be wide variations in the reliability of the data obtained from such studies because records may be incomplete and interviews rely on people who may have imperfect memories.

Challenges of Implementing an Effective Program

- Watermelons have a relatively short shelf life, so it is often gone before an outbreak is reported or investigated
- Recycling of shipping crates and commingling with watermelons from other sources makes identification difficult
- The source of contamination may no longer be present when investigators arrive on the scene, field or packing facility. For example, this wide variability can result in false accusations that are often not fully rectified

Advantages of an Effective Traceback System

- A specific area, as opposed to an entire commodity group, can be identified
- The speed and accuracy of tracing implicated food items back to their source can be improved, minimizing the number of people affected in an outbreak
- Tracing implicated food items may also help identify and develop new and better methods to prevent and minimize contamination

Instituting Effective Traceback Systems

Traceback systems may be easier to implement for certain types of commodities and for larger operations that have more control of watermelons from field to consumer. But this should not deter others from developing systems.

Current company procedures should be examined and systems developed to track individual watermelons from the farm, to the packer, distributor, food service operation and retailer in as much detail as possible. At a minimum an effective traceback system should include documentation to indicate the source of a watermelon and a mechanism (such as a bar code, stamp, sticker, tag, etc.) that can identify and follow the watermelon from the farm to the consumer. Documentation should include date of harvest, farm identification and who handled the watermelon from grower to receiver.