The outbreak of a food-borne illness linked to fresh produce can devastate the livelihood of a produce farmer. Media reports and consumer fear can reduce consumption of a given crop even when the source of contamination is identified elsewhere and local supplies are cleared. “Fresh produce safety training for farmers is an important step toward minimizing the risk of contamination and bolstering consumer confidence,” says Diane Ducharme, who leads the Fresh Produce Safety initiative of N.C. MarketReady, a program of N.C. Cooperative Extension.

N.C. MarketReady, along with the N.C. Fresh Produce Safety Task Force, developed a training curriculum, *Fresh Produce Safety—Field to Family Good Agricultural Practices (GAPs)*, in 2009. The curriculum consists of nine modules and is divided into two seven-hour training tiers. Cooperative Extension agents lead the training for local producers through a series of workshops including education about field production, worker health and hygiene, packing facility sanitation, traceability, crisis communication, and managing risk and liability. “Regional workshops were held throughout 2008 and 2009 to prepare N.C. Cooperative Extension agents with tools on Good Agricultural Practices,” reports Ducharme. “More than 120 Extension agents have been trained in these workshops, with web-based training resources available for new and returning agents.”

**Impacts Observed by Agents**

The trainings focus on risk reduction and prepare producers for a third-party audit, a requirement for GAPs certification. While GAPs certification is not legally mandated, many buyers are seeking growers who can exhibit a commitment to fresh produce safety, and GAPs certification is one measure that demonstrates that commitment.

“Many growers who have participated in the Tier 1 training have gone on to become GAPs certified with an audit and many plan to apply for GAPs certification later this year,” reports Billy Little, Extension agent in Wilson County. “In addition to a broad look at food safety, growers have the opportunity to ask individual questions that deal with water, irrigation, labor and packing issues.” The training sessions also provide a unique opportunity for growers to learn from one another. Though every farming operation is different, growers can share personal experiences and challenges that provide insight to fellow growers who may be newly introduced to these practices.

Amie Newsome, commercial horticulture agent in Johnston County, has found that several farmers, after completing the training, have installed hand-washing stations and removed family pets from the areas where food is located. In one instance, she was able to review a farmer’s plans for a mobile produce stand. “I recommended that he include water on the stand so that the risks from both employees and clients could be addressed by washing their hands,” says Newsome.

Implementing safety practices and keeping records of routine maintenance can also be used to reassure customers, even if an incidence of illness has been reported. Mark Seitz, area specialized agent in southeastern North Carolina, assisted a strawberry grower this past spring when a customer complained of an illness he attributed to consumption of fresh produce, possibly strawberries his family had purchased from that farm. “The grower was able to demonstrate to the customer the programs and practices that are in place to monitor for food safety,” says Seitz. He credits the Tier 1 training for enabling the grower to show that the farm took a proactive stance to ensure the safety of its products. “The customer was satisfied that food safety was important on this farm and, in spite of the illness encountered, the customer would return to buy produce again.”

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Impacts on the Farm

The training for growers is not simply intended as classroom instruction. The goal of this educational effort is to encourage growers to return to their operations and implement improvements in their production, harvest and handling practices that will minimize fresh produce safety risks.

Though many growers are not immediately pursuing GAPs certification, they are making some changes in their practices and planning how other changes might be implemented given their increased awareness. Two growers who completed the training, Tim Bass and Amanda Sizemore, have yet to seek GAPs certification but are initiating some simple, common sense practices for food safety. Both operations are prepared to further modify their operations for GAPs certification if their buyers ask for it.

Bass, of Sunburst Tomatoes in Nashville, N.C., completed the training under the direction of Little. “The training was very useful and informative,” says Bass. Since completing the training, he has implemented the use of hand-washing stations in the field. Sizemore, of Cane Creek Valley Farm in Fletcher, also wanted to add hand-washing stations after completing the training. She found that her supplier for portable restrooms did not offer hand-washing stations. After some research, her husband, Jeremy Sizemore, engineered two hand-washing stations using a gravity-fed system with clean water moving out a barrel with a spout into a barrel catch basin. A soap dispenser and paper towels were mounted to the side of the barrels.

Patterson Farms, Inc., in China Grove, has been GAPs certified for tomatoes and strawberries for more than a year. “In most cases, we were following fresh produce safety protocol, but we weren’t documenting it to the extent that was necessary for GAPs certification,” says Doug Patterson. While the documentation is time-consuming, Patterson acknowledges that if a question were to arise, the paper trail would allow for a speedy trace-back of the product.

Skipper Russell, a produce farmer in Waynesville, has worked with Ducharme and Sue Colucci, area specialized agricultural agent in western North Carolina, to prepare for a third-party audit for GAPs certification. “We’ve come a long way since the training, which helped us understand the practices we needed to have in place and gave us the information we needed to educate consumers,” explains Russell. A buyer is interested in Russell’s product, but will not commit to bulk purchases until Russell secures GAPs certification. “The market conditions are changing as more consumers are looking for local, certified, safe produce,” says Russell. “And we need to change to adhere to those criteria.”

The fresh produce safety training initiative under way in North Carolina works to ensure the vitality of the fresh produce industry by minimizing food safety risks and enhancing the economic competitiveness of N.C. crops for the benefit of farmers and consumers.