



Module 8: **Managing Liability and Risk**

Acknowledgments

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Module 8: Managing Liability and Risk

Estimated duration: 2 hours

Instructional goal:

- Raise growers' awareness of liability issues related to growing fresh produce for market, and provide them with a basic understanding of risk-management tools.

Instructional objectives:

Enable participants to assess their overall risks and make informed decisions regarding:

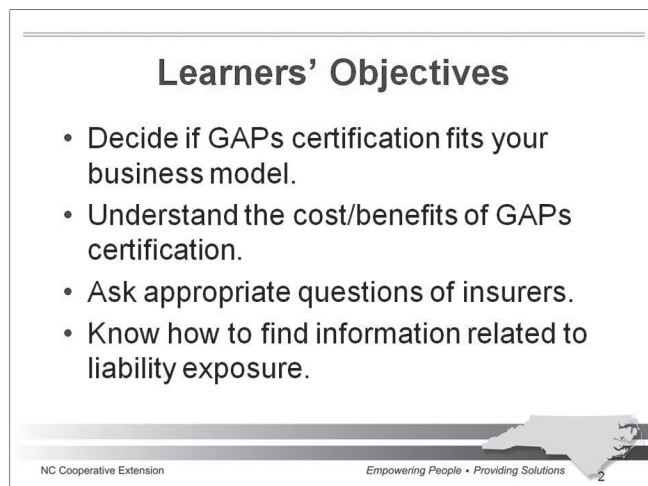
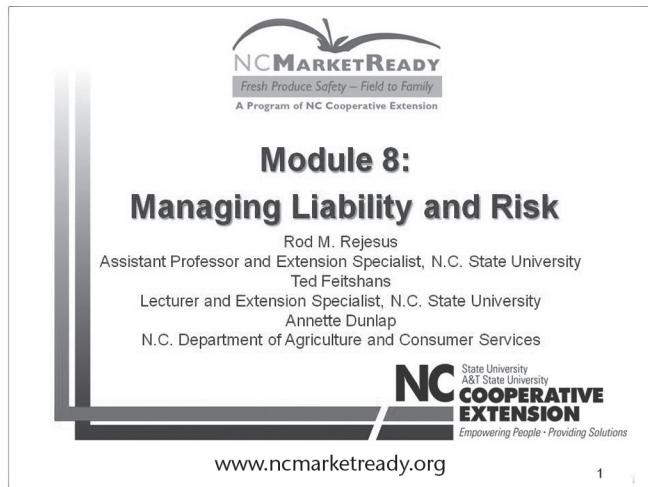
- economic value of obtaining Good Agricultural Practices (GAPs) certification
- risks associated with market opportunities
- liability exposure of their operations
- adequacy of their insurance coverage.

Equipment, supplies, and materials needed:

- Laptop and LCD projector
- PowerPoint (PPT) presentation on CD
- Nametags, pens

Preparation needed:

- If an outbreak of a food-borne disease related to fresh produce occurs at the time of this presentation, it may be helpful for the presenter to review current reports provided by a trusted source, such as N.C. Department of Agriculture and Consumer Services (NCDA&CS), U.S. Food and Drug Administration (FDA) or Centers for Disease Control (CDC).
- Presenter may also want to check the U.S. Department of Agriculture or FDA web sites to see if reports on causes and/or economic impact of previous outbreaks of food-borne disease related to fresh produce have been made available.
- Review Module 8 and PPT 8 prior to the day of the workshop.
- Become familiar with GAPs programming, how each module is an integral part of the other modules.
- Arrange room for optimal participation.
- Secure a laptop computer with PowerPoint capability and LCD projector. Save a copy of the PowerPoint presentation (on CD) on computer. Make copies of case studies, relevant audit examples and post-test for all participants.
- Prepare room to accommodate participants and projector. Have sign-in sheet and nametags, as applicable.



Module 8

Welcome

Have participants make nametags and introduce themselves

PPT 8-1: Module 8: Managing Liability and Risk

Use Module 8 PPT to lead class discussion; have PPT 8-1 on screen as class begins.

This material assists the grower in making informed business decisions about the economic value of obtaining GAPs certification.

Information covered includes:

- cost/benefit analysis of GAPs certification
- historic cost/benefit case studies of GAPs certified operations' performance following outbreaks of fresh produce food-borne illness
- liability "primer"—explanation of liability as it relates to fresh produce
- insurance "primer"—overview of types of insurance and North Carolina insurance regulations (i.e., "Are you *really* covered?"):
- general farm liability
- product liability (including contamination and malicious tampering)
- product recall.

PPT 8-2: Learners' Objectives

Introduction

- GAPs certification is voluntary (not mandatory).
- Growers of fresh produce need to decide whether to adopt GAPs and get certified
 - Economic decision
 - Weigh benefits vs. costs

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PPT 8-3: Introduction

Benefits and Costs of Third-party GAPs Certification

With increased concerns about potential outbreaks of food-borne illness from eating fresh produce (and the attendant economic/financial losses from these outbreaks), many growers have voluntarily adopted GAPs to minimize the probability of microbial contamination on their farms and improve their food-safety systems.

PPT 8-3 (continued)

However, the use of GAPs per se will not make a difference in consumer demand for fresh produce if these growers do not effectively signal to buyers that they have taken steps (i.e., GAPs) to improve their farms' food-safety system. In most cases, consumers find it difficult (or impossible) to tell if fresh produce is grown with GAPs or not. The buyer, in this case, faces what economists call an "asymmetric information" problem where he or she does not have information about the safety of the fresh produce.

One increasingly important approach to address this problem is the use of third-party GAPs certification to indicate to consumers/buyers that appropriate food-safety practices are in place at the farm during the production process. Since third-party GAPs certification is voluntary (and not yet mandated by law), growers need to determine whether or not to use this certification process in their operation by weighing its economic benefits and costs.

Economic Benefits of GAPs Certification

- Economic Risk Reduction
 - GAPs adoption and certification not 100 percent guarantee of food safety
 - Reduces risk/probability of outbreak
 - Calculate potential economic loss with and without GAPs
- Improved Market Access Opportunities
 - Many markets require 3rd-party GAPs certification
 - Credibility from having 3rd-party certifiers

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PPT 8-4: Economic Benefits of GAPs Certification

(1) Reduced Economic Risks

Reduced risk of having an outbreak originate from the farm.

GAPs adoption and certification is not a 100-percent guarantee of food safety.

It only reduces the risk or probability of an outbreak.

The risk of economic losses (catastrophic drop in sales, damage to reputation, potential lawsuits) can be reduced.

Calculate potential economic loss with and without GAPs. Weigh the loss based on the probability of having an outbreak (own perceptions).

Positive/negative externality effect to the fresh-produce industry of being GAPs or non-GAPs certified.

PPT 8-4 (continued)

The outbreak doesn't just affect the farm where the outbreak originated but also affects all growers (regardless of whether GAPs are certified or not).

(2) Improved Market-Access Opportunities

Many retailers and other buyers require third-party GAPs certification as a condition of purchase:

- Safeway
- Fruit and vegetable shippers

Having third-party certifiers gives the farms credibility.

Additional Information:

There are two main benefits to GAPs adoption and certification: (1) reduced economic risk, and (2) improved market-access opportunities.

Reduced Economic Risk

When a farm appropriately implements GAPs and gets certified by a third party, one direct benefit to the farmer is the reduced risk of having a food-borne disease originate from the farm. Note, however, that GAPs adoption and certification do not guarantee food safety (i.e., they do not completely eliminate the risk of contamination or outbreak). They only reduce this risk. A successful certification is simply an informed opinion on the state of farm operations at a particular point in time as they relate to food safety.

Nevertheless, the risk of *economic losses* associated with an outbreak of a food-borne illness is also reduced with GAPs adoption and certification, given that the probability of having an outbreak is reduced. The risk of large economic losses due to an outbreak—such as a catastrophic drop in sales (especially if contaminated produce is traced to the farm operation), damage in farm and farmer reputation, and potential lawsuits—is reduced with GAPs adoption and certification. However, these benefits (i.e., the economic losses avoided) only accrue to the grower in the event of an outbreak. Hence, to estimate more accurately the benefits of reduced economic risk as a result of having GAPs certification, a grower needs to compare the farm's potential economic losses with and without such certification. Until an outbreak occurs, however, growers typically think that the probability of having an outbreak and getting the economic benefits of GAPs certification is very low. Since getting an accurate estimate of the "probability" of an outbreak is practically impossible, calculating the reduction of economic risk as a result of GAPs certification often depends on the growers' own perception of the probability of an outbreak.

Another important, but subtle, benefit of third-party GAPs adoption and certification is what economists call the "positive externality" effect to the whole fresh-produce industry. When an outbreak of food-borne illness occurs, the individual grower whose produce was contaminated is not the only one affected. All growers of fresh produce suffer. Hence, if a producer uses GAPs and gets certified, he or she not only reduces his own risk of suffering losses but also reduces the risk of economic losses for other growers in the industry (whether they be GAPs or non-GAPs certified). In contrast, if a grower does not adopt GAPs and does not get certified, when an outbreak gets traced back to his or her farm, not only will the non-compliant producer suffer but also the whole produce industry—a "negative externality" effect. For growers considering GAPs adoption and certification, it is important to realize that they are providing a positive externality benefit to the fresh produce industry when they eventually decide to use GAPs.

Improved Market Access Opportunities

A more immediate economic benefit of GAPs adoption and third-party certification is the improved opportunities for market access. GAPs certification opens markets for producers to expand sales to major supermarket chains, school systems and restaurants. Many retailers and food-service buyers now

require third-party certification of a grower's compliance to GAPs as a condition of purchase. Thus, having a GAPs certification gives growers broader market access (Calvin, 2003).

In 1999, for example, Safeway, the third largest U.S. food retailer, expanded its food safety program to require all its suppliers of certain food commodities to verify that they follow government food-safety standards and specifications in production and packing. Some large retailers have followed suit. To qualify as a Safeway supplier, a grower must have an independent third-party auditor verify that the grower is using GAPs in the production process. Requiring verification of the use of GAPs was a new idea at that time and met initial opposition. Domestic and imported produce sold by Safeway must meet the same standards.

Research covering a select group of U.S. fruit and vegetable shippers indicates that in 1999, almost half of those studied provided third-party audits for GAPs for at least one of their buyers. While shippers were not always happy about complying with this request, most indicated that they would implement verification programs in response to changing buyer preference (Calvin et al., 2001). In this study, shippers tried to distance themselves from those growers with no third-party GAPs certification. These shippers recognize that they can reduce risk by requiring growers to provide third-party audits for GAPs. Hence, only growers with this type of third-party certification can take advantage of the market opportunities afforded by these shippers.

Another important aspect of using third-party GAPs verifiers is credibility. While growers could conceivably do their own food safety and GAPs audits, third-party audits of GAPs by reputable companies/individuals/groups provide a level of additional credibility. An important issue for growers in this case is finding a reputable third party to do the GAPs certification. There is no government oversight of third-party audit firms—an issue that concerns many in the fresh produce industry (*The Packer*, 2002). Standards may vary between the auditing firms and between retailers requiring audits. Hence, growers need to be careful in choosing the third-party certifier to get the benefits of additional credibility and opportunities for improved market access. North Carolina growers should contact the N.C. Department of Agriculture and Consumer Services for information about credible third-party auditors. See the end of this document for contact information.

Economic Costs of GAPs Certification

- Costs of adopting GAPs
 - Large capital investments (e.g. water purification facility)
 - Moderate expenditures (e.g. training on worker hygiene)
- Cost of hiring third party to undertake certification
 - No hard data
 - 2001 estimate: \$300-500 per farm

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PPT 8-5: Economic Costs of GAPs Certification

Economic Costs

Weighing against the potential benefits of GAPs adoption and certification are the costs, which are often immediate and sometimes large. When a grower decides to have a third-party audit on his or her farm, the first step is to adopt or implement GAPs in the production process to comply with GAPs certifications guidelines. Costs of adopting these GAPs may include large capital investments for water-purification equipment, for example. Such costs may also include more moderate expenditures such as worker training intended to improve hygiene, and the upgrading of record-keeping technologies. Note that there is no “one-size fits all” set of practices that allow growers to be automatically GAPs certified. Growers have the leeway to choose the most cost-effective combination of practices to satisfy GAPs certification requirements. Therefore, two growers

PPT 8-5 (continued)

in different areas with different environmental conditions could both adhere to GAPs principles and be certified, but use different methods to do so.

Another important immediate cost of third-party GAPs certification is the cost of hiring the third party to undertake the GAPs certification. Typically, growers hire third-party firms first to evaluate the food-safety systems in their operations and then suggest ways to meet GAPs guidelines. In 2001, an FDA report estimated the cost of third-party GAPs evaluation at \$300-\$500 per farm (FDA, 2001). An evaluation would include a review of the current food-safety system of the grower and an assessment of what additional practices might be needed to reduce the chance of contamination, including the documentation necessary to assure continuous compliance with GAPs. Once the GAPs have been implemented, growers can then decide to have their operations certified by third parties and/or periodically audited to check for compliance. In 2001, FDA estimated that the typical cost of an audit/certification is similar to the cost of evaluation—\$300-\$500 per farm (FDA, 2001). Admittedly, these figures are a little bit dated but this gives an idea of the immediate certification cost that a grower must pay if he or she wants third-party GAPs certification.

Case Study: Spinach

- Sept. 14, 2006 – FDA announced spinach contamination due to *E. Coli*
- No fresh spinach sales for 5 days
- Spinach from CA off the market for 10 days

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PPT 8-6: Case Study: Spinach

Spinach

On September 14, 2006, the FDA announced that consumers should not eat bagged spinach because of an outbreak of illness due to contamination with the potentially deadly bacterium *Escherichia coli* O157:H7 (commonly called *E. coli* O157:H7). Stores and restaurants immediately cleared bagged spinach from their shelves and menus. Spinach harvesting and marketing ceased. There were no U.S. fresh spinach sales for five days, before FDA announced spinach from some areas was safe to consume. Spinach from the main production area of California was off the market for an additional 10 days.

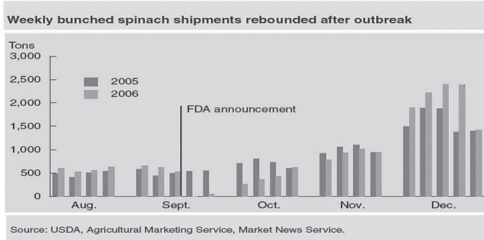
PPT 8-6 (continued)

The contamination was eventually traced to a load of spinach from one 2.8-acre field packed at one processing facility on August 15. This field was part of a 50.9-acre parcel of land leased by a firm for leafy green production; the owner of the ranch used the rest of the property for grazing cattle. The leafy greens were grown with organic methods, but since the fields were only in the second-year of the three-year transition to organic, the spinach was sold as conventional. Note that organic or conventional operations must address the threat of microbial contamination.

According to the California Food Emergency Response team, the grower did not contract for a third-party audit for compliance with FDA's GAPs food safety guidelines before the 2006 growing season began. Potential environmental risk factors at or near the field included the presence of wild pigs and irrigation wells near surface waterways exposed to feces from cattle and wildlife. The outbreak strain of *E. coli* O157:H7 was identified in samples of river water, cattle feces and wild pig feces on the ranch; the closest contaminated sample was just under one mile from the spinach field. But the precise means by which the bacteria spread to the spinach remains unknown.

Case Study: Spinach

Shipments of bunched spinach rebounded quickly.



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Case Study: Spinach

Bagged spinach sales are down four months after outbreak.

In 2007, bagged spinach and salad retail sales values still lag

	Percent change in sales value from a year ago for:	
	January 24-February 24, 2007	August 24, 2006-February 24, 2007
	Percent	
Bagged spinach	-27	-43
Bagged salad with spinach	-24	-42
Bagged salad without spinach	-5	-8

Source: Perishables Group, Facts, Figures & the Future.

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Case Study: Spinach - Market Outcomes

- Whole industry suffered from outbreak, even if only one field was contaminated (negative externality)
 - GAPs- and Non-GAPs-certified growers affected
- In March 2007, fresh produce handlers to service only GAPs-certified growers
 - Able to recover faster
 - Market access benefits

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PPT 8-7: Case Study: Spinach

On Sept. 29, 2006, FDA announced that “spinach on the shelf is as safe as it was before the event.” Sales began to pick up afterwards, but recovery varied by type of spinach—bunched vs. bagged. In Figure 1, we see that bunched spinach rebounded fairly quickly; in December shipment volume was higher than in December of the previous year (Calvin, 2007).

PPT 8-8: Case Study: Spinach

However, for the bagged-spinach sector, retail sales recovered slowly. For the period Jan. 24 to Feb. 24, 2007, five months after the outbreak, retail sales value of bagged spinach was still down 27 percent from the same period the year before (Figure 2), although that was much improved relative to the low sales value immediately after the outbreak. Dunlap (2007) also estimated that although spinach prices improved from Oct. 2006 to Dec. 2006, the price of spinach in December 2006 was still 54.8 percent lower than the price in the same month the year before.

PPT 8-9: Case Study: Spinach—Market Outcomes

With the *E. coli* O157:H7 outbreak in the fall of 2006, it is important to note that all spinach growers suffered from the decreased consumer demand for their product, even though only one grower’s spinach was contaminated (i.e., the negative externality effect discussed previously). Even if other spinach producers used third-party GAPs certification, these GAPs-certified farmers were still affected by the outbreak. However, one can argue that these GAPs-certified producers would not have been affected as severely by the outbreak and, presumably, would have recovered more quickly than non-GAPs-certified spinach growers. Unfortunately, there are no hard data available to validate this claim. But given that many California handlers of fresh produce in March 2007 agreed

PPT 8-9 (continued)

to buy fresh produce only from growers who follow GAPs, the GAPs-certified spinach growers would have been more able to immediately take advantage of this market opportunity. Non-GAPs-certified spinach growers would have taken a longer time to comply with the handlers' GAPs requirement and would have suffered more financial or other economic losses due to this delay. This shows the market-access benefits of having third-party GAPs certification prior to a disease outbreak.

Case Study: Cantaloupes

In May 2002, an outbreak of *Salmonella* in the U.S. and Canada was associated with Mexican cantaloupe.

- Shipped through McAllen, TX
- 58 cases identified
- 3rd season of *Salmonella* outbreak from cantaloupes traced to southern Mexico

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PPT 8-10: Case Study: Cantaloupes

Cantaloupes

In May 2002, an outbreak of *Salmonella poona* in the United States and Canada was associated with Mexican cantaloupe shipped through McAllen, Texas. Fifty-eight cases were identified. The importing firm immediately issued a voluntary recall. This was the third season of outbreaks traced to Southern Mexico.

Case Study: Cantaloupes

- In October 2002, the FDA issued an import alert against all cantaloupe exports from Mexico.
- To be removed from alert, Mexican farmers must petition FDA and provide documentation of food safety/GAPs practices.

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PPT 8-11: Case Study: Cantaloupes

In October 2002, FDA issued an import alert against all cantaloupe imports from Mexico. Although the outbreaks had been traced just to two states in Southern Mexico (Michoacan and Guerrero), FDA justified the countrywide import alert because of FDA samples showing *Salmonella* contamination from other states (Sonora, Jalisco, Colima, Coahuila, Mexico and Tamaulipas). Also, FDA was concerned that with a regional approach, melons from restricted regions could be commingled with melons from a nonrestricted area.

Case Study: Cantaloupes

- FDA will conduct on-site inspections with priority to growers with third-party certification of food safety practices/GAPs.
- With this priority, GAPs certified producers can recover more quickly.
 - Can access markets faster than non-GAPs producers
 - Market access benefits (first-mover advantage)

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PPT 8-12: Case Study: Cantaloupes

For individual Mexican growers to be removed from the countrywide import alert, individual farmers must formally petition FDA and provide documentation of their food-safety practices. In response, the FDA will then conduct onsite inspections of the growing and processing areas to audit the validity of the information submitted. In this process, FDA gives first priority to growers who had their operations inspected by a third-party institution that has expertise in agricultural food-safety processes. Note, however, that a third-party audit showing compliance with GAPs will not necessarily be enough to be removed

PPT 8-12 (continued)

from the import alert. But given that third-party certified growers are given priority, this again suggest that GAPs-certified growers may recover faster from the economic losses associated with the outbreak than non-GAPs-certified growers. GAPs-certified growers would be the first growers to be inspected by FDA. If they pass the inspection, these growers would have market access and will have the “first mover” advantage in the U.S. cantaloupe market. This case again reflects the potential market access benefits of being GAPs certified.

Case Study: Green Onions

- In November 2003, outbreaks of Hepatitis A in TN, NC and GA were associated with undercooked green onions.
 - One person in TN died.
 - 500 people contracted Hepatitis A from PA diner.
- FDA identifies four Mexican firms as source (not GAPs-certified).

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PPT 8-13: Case Study: Green Onions

Green Onions

On November 15, 2003, FDA announced that Hepatitis A outbreaks in September in Tennessee, North Carolina and Georgia were associated with raw or undercooked green onions. At that time, FDA reported that the green onions in the Tennessee case “appeared” to be from Mexico. One person in Tennessee died. On November 20, 2003, FDA announced that green onions from Mexico were implicated in the Tennessee and Georgia outbreaks. FDA never determined the source of the green onions associated with the outbreak in North Carolina. In late October and early November, before FDA’s first announcement regarding contaminated green onions, another very large outbreak of Hepatitis A occurred in Pennsylvania among diners at one restaurant. More than 500 people contracted Hepatitis A and three died (Dato et al., 2003). On November 21, FDA announced that this outbreak was also associated with green onions from Mexico and named the four firms that grew the product associated with the outbreak. Identification of the four firms was based on epidemiological and traceback evidence.

Case Study: Green Onions

GAP status	Impact on:	
	Volume of green onion sales	Demand for other products
GAPs	Fairly constant	No impact
Partial GAPs	Down a bit	Some impact
No GAPs	Down by 50 percent	Down by about 30 percent
No GAPs and named by FDA	No sales and most fields plowed under	Shippers stopped selling all or almost all products from these growers

Estimated losses: \$10.5 M

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PPT 8-14: Case Study: Green Onions

Eventually, the FDA determined that the contaminated green onions came from Mexico. The FDA was not able to pin down exactly where the produce became contaminated—at the farm, packing shed or in the distribution chain—as it made its way into the U.S. food system. However, the Hepatitis A virus sequences from the outbreaks traced to Mexico were identical or very similar to sequences found in sick people living along the U.S.-Mexico border or returning from visits to Mexico. But eventually, FDA named four growers in Mexico as associated with the outbreaks and issued an import alert, ordering border inspectors to reject all shipments of green onions

PPT 8-14 (continued)

from these firms. The four firms named by FDA as associated with the outbreak did not have third-party GAPS certification for their summer operations (which is the season when the contaminated green onions were most likely produced). Soon after the outbreaks, the FDA went to Mexico to investigate these four farms and on December 9, 2006, issued a press release outlining the food-safety issues that may have contributed to the outbreak—poor sanitation, inadequate hand-washing facilities, questions about worker health and hygiene, the quality of water used in the fields, packing sheds and the making of ice.

On December 10, 2003, the green onion price fell by 72 percent compared to the price the day before the FDA outbreak announcement (Calvin, Avendaño and Schwentesius, 2004). Demand for green onions dropped because of concerns about food safety. Supplies from Mexico dwindled. Prices then rose steadily from \$5.73 on Dec. 10 to \$11.73 on Dec. 31, 2003. Two weeks after the Hepatitis outbreak, shipments of green onions from Mexico also decreased by 42 percent. Shipments began to rebound during the first week of December 2003 and were about at “normal” volume by the end of the month.

Overall, the estimated losses for Mexican green onion growers was \$10.5 million due to lost sales and lower prices on actual sales (for the period Nov. 16-29, 2003). Growers incurred additional losses when fields went unharvested due to low demand. In the last week of November, Mexican growers left 48 hectares of green onions unharvested. In December, an additional 317 acres were left unharvested. Green onion fields are planted every few weeks to provide a continuous supply for harvest. With the decline in demand, growers probably cancelled some planned plantings. The decline in harvest resulted in a decline in demand for labor, which had a serious impact on the local economy. Growers not named by the FDA as the source of contamination indicated that the negative market impacts of the Hepatitis A outbreak lasted from one to four months (Calvin, Avendaño and Schwentesius, 2004).

As with the spinach case above, all growers were affected by the general loss of consumer confidence in green onions and lower prices whether these growers were GAPs-certified or not (i.e., negative externality effect). However, interviews with a limited number of Mexican green onion growers in June 2004 indicated that growers with third-party GAPs certification had higher volumes of sales than other growers (See Table 1). If buyers needed green onions, they sought growers with the best food-safety programs although they did not pay more for the green onions. For these growers, green onion shipments did not decrease markedly nor were their other crops affected. Growers who were in the process of becoming GAPs-certified and had audits to demonstrate their progress to date in improving food safety also fared reasonably well. Their shipments of green onions usually fell a bit and demand for some of their other crops dropped slightly. For producers who were not GAPs-certified, green onion sales declined to about half the normal volume and demand for other products sold by these firms de-

PPT 8-14 (continued)

clined by about 30 percent. For those growers who were not compliant with GAPs and were named by FDA as associated with the contaminated green onions, the impact was catastrophic. Shippers did not want green onions or any of their other products. These growers plowed up most of their green onions and sold small amounts to the domestic Mexican market.

Table 1. Impact of Hepatitis Outbreak on Mexican Growers, by GAPs Status

GAPS Status	Impact on:	
	Volume of green onion sales	Demand for other products
GAPs	Fairly constant	No impact
Partial GAPs	Down a bit	Some impact
No GAPs	Down by 50 percent	Down by about 30 percent
No GAPs and named by FDA	No sales and most fields plowed under	Shippers stopped selling all or almost all products from these growers

Having a Risk Management Model Is Important

- Purpose:
 - Orderly management of risks
 - Reduces economic losses
 - Highest return on risk management dollars
 - Identification of training needs for management and employees

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PPT 8-15: Having a Risk Management Model Is Important

One thing that the previous section on GAPs tells us is that there are food safety risks in production and management, and treatment of these risks (through GAPs, for example) can help the growers’ bottom lines. GAPs is just one approach to management of food-safety risks. Growers should also consider implementing a “risk management model” to address the different kinds of risk that they can face. Having a risk management model will allow one to: (1) orderly manage the different kinds of risks (which can reduce economic loss), (2) get the highest return on the money to be invested in risk management, and (3) identify critical needs for management and employees to address these risks.

Steps in a Risk Management Model

- Risk Identification
- Risk Evaluation
- Risk Treatment
 - Insurance is one of many risk treatments
- Selection and Implementation
- Program Monitoring

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PPT 8-16: Steps in Risk Management

To have a good risk management model for the farm business, the following steps are necessary: (1) risk identification, (2) risk evaluation, (3) risk treatment, (4) selection and implementation, and (5) program monitoring.

Insurance Is One Mechanism to Protect Against These Risks

- What types of insurance policies are out there for food safety-related risks?
- What are their characteristics?
- Growers need to make informed insurance purchase decisions.

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PPT 8-17: Insurance Is One Mechanism to Protect Against These Risks

Growers of fresh produce today face a number of risks associated with outbreaks of food-borne illness. First, consumers affected by these outbreaks can take legal action against growers of the affected fresh produce to claim monetary damages due to illness (also called liability risk). Second, regulators can issue a product recall or warning because of the outbreak and this can cause huge economic losses to growers due to a catastrophic drop in sales and/or damaged farm or product reputation. The risk of economic losses from lawsuits, product recalls and warnings are becoming

PPT 8-17 (continued)

increasingly important these days because outbreaks of food-borne illness are occurring more frequently.

Insurance against the risk of economic losses from these outbreaks is one important mechanism that growers can utilize to safeguard the profitability of their business operation. With the variety of insurance coverage or policies available, it is important for growers of fresh produce to understand what insurance policies cover so that they can make informed decisions about the insurance they should purchase for their farm operation. Note that the information given here only provides basic information about the different insurance types. For more details about which insurance may apply to their particular operation, we advise growers to contact their insurance agents.

Insurance Coverage Options for Risks Related to Food Safety

- Increased concerns about outbreaks of food-borne illness
 - Tomatoes (*Salmonella*)
 - Spinach (*E. Coli*)
- Outbreaks are becoming more frequent
- Economic losses due to outbreak:
 - Monetary damages from lawsuits
 - Financial damage from product recall/warning (cost of taking off shelf, catastrophic drop in sales, damaged reputation, business interruption, etc.)

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PPT 8-18: Insurance Coverage Options for Food Safety-Related Risks

No notes

Insurance Coverage Options

- General farm liability insurance
- Commercial business liability insurance
- Product liability insurance
- Product recall insurance
- Accidental/product contamination insurance

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PPT 8-19: Insurance Coverage Options

No notes

Insurance Coverage Options

- Malicious tampering insurance
- Combination policies
- Excess/umbrella/surplus lines of insurance
- Adjusted gross revenue (AGR) or adjusted gross revenue-lite (AGR-Lite) insurance

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PPT 8-20: Insurance Coverage Options

No notes

General Farm Liability Insurance

- Protects against liability claims for bodily injury and property damage arising out of one's premises and/or operations.
- Protects against lawsuits due to on-farm accidents.
- Recommended for pick-your-own operations and with on-farm stands.
- Covers lawsuits from activities considered "farming."

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PPT 8-21: General Farm Liability Insurance

A general farm liability insurance policy typically protects against liability claims for bodily injury and property damage arising out of one's premises and/or operations (IRMI, 2008). In other words, this type of insurance policy covers general costs and damages in case someone decides to sue the farm business because of something that happened on the premises. These types of farm liability policies cover lawsuits due to on-farm accidents that affect farmers, employees, guests and customers.¹ Outlaw (2007) and the New England Small Farm Institute (2008) suggest that these general commercial and/or farm liability policies would be appropriate for growers with pick-your-

¹ Note however that this policy does not replace Worker's Compensation insurance and only typically covers activities considered "farming."

PPT 8-21 (continued)

own operations and on-farm stands. The New England Small Farm Institute (2008) further explains that farm liability insurance covers lawsuits from activities considered “farming,” which is usually defined to include only agricultural-production activities and on-farm roadstands. These policies also typically cover the sale of produce in its raw, unprocessed state, either on-farm sales or sales of the grower’s produce at the grower’s stand at a farmers market. The sale of produce grown by another farmer, even if the produce is sold “raw and unprocessed,” is not covered under a general farm liability policy.

Commercial Business Liability Insurance

- Same as general farm liability but may cover activities considered “non-farm” or “non-agricultural.”
- For growers that process fresh produce and have processing facilities.
- For growers that sell in farmer’s market and sell large proportion that originate off-farm.

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PPT 8-22: Commercial Business Liability Insurance

Commercial business liability insurance may be necessary if the grower also undertakes activities that are not considered “agricultural” or “farming” (New England Small Farm Institute, 2008). It works essentially the same way as the general farm liability insurance above except that it covers “non-farm” or “non-agricultural” activities. The insurance is appropriate for growers who process fresh produce and have processing facilities. This insurance is also appropriate for growers who sell in farmers’ markets or sell more than a certain percentage of products that originate off-farm (New England Small Farm Institute, 2008).

PPT 8-23: Product Liability Insurance

A lot of growers of fresh produce mistakenly believe that their general farm liability policy provides protection against claims of injury from contaminated fresh produce that cause an outbreak of a food-borne illness. But as Hamilton (1999) explains, this is not generally the case because the injury can happen off the farm premises. In this case, a product liability insurance policy is appropriate since it protects against claims of injury caused by a defective or hazardous product (e.g., the contaminated fresh produce). This type of coverage should provide some protection in the event that the fresh produce causes injury or

Product Liability Insurance

- Protects against claims of injury caused by a defective or hazardous product (e.g., contaminated fresh produce);
- Provides protection if fresh produce causes injury or illness;
- Strictly covers claims of injured parties, not recall costs.
- Premium estimate: \$1,000 per year for \$1 million of protection

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PPT 8-23 (continued)

illness to a consumer (Holland, 2007). A number of retail stores now require that food products have a minimum level of product liability coverage before they will carry it (normally a \$1 million policy or more). It is important to note, however, that food-product liability insurance strictly covers claims of injured parties and not recall costs.

The cost of food-product liability coverage is not easy to estimate. Providers of this insurance policy are often reluctant to provide quotes since there is no “standard” premium rate for food products and the industry is very competitive. Instead, most insurance companies that offer this coverage provide an estimate only when the grower submits a very detailed description of his or her product and business operations (i.e., production, distribution and marketing plans). However, an approximate “rule-of-

thumb” in the industry is around \$1,000 per year for a \$1 million policy.

Based on an informal survey of insurance providers (undertaken in May 1998), Holland (2007) indicates that the annual premiums for food-product liability insurance ranged from \$500 to \$20,000 for a \$1 million policy. The average food-product liability premium was found to be \$3,000 for a \$1 million policy. The most significant factors contributing to the amount of premium being charged are the following: level of gross sales or annual payroll, prior claims (i.e., claims history), level of coverage, type of product, type of market and recall plan.

Product Recall Insurance

- Covers actual or direct costs of a product recall.
 - Costs associated with getting contaminated product off the shelf and destroyed; cost of replacement; transport costs
- Does not cover indirect costs.
- Intended for growers that were contaminated (source).

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PPT 8-24: Product-Recall Insurance

A product-recall insurance policy typically only covers the *actual* or *direct* costs of a product recall, such as costs associated with getting the contaminated product off the shelf and destroyed, costs of replacing contaminated products and transportation costs. It does not cover *indirect* costs or losses due to the product recall or an outbreak warning, such as third-party expenses, loss of profit and business interruption losses. Third-party expenses refer to those costs that occur when a downstream retailer of a food product loses business as a result of the contamination.² Loss of profit

PPT 8-24 (continued)

refers to such instances where the product recall or warning damages consumer confidence in the particular grower of the fresh produce in such a way that revenues in the current or next business cycle are negatively affected. Business interruption losses are those losses resulting from a period where the growers’ operations shut down.

It is important to remember that product recall insurance only covers recall costs for growers who caused the contamination or outbreak. For those growers who were not a source of contamination but whose products were also taken off the shelf as a precaution, their recall losses may not be covered by the product-recall insurance policy. This is especially problematic if, for example, no government entity officially traced or narrowed the geographic area of the source of the contamination (Odza, 2008).

Accidental or Product Contamination Insurance

- Covers both direct and indirect costs of product recall.
- Examples of indirect costs – third-party expenses, loss of profit due to recall (lost confidence), business interruption losses.
- Intended for growers that were contaminated.

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PPT 8-25: Accidental or Product Contamination

As mentioned above, the product-recall insurance policy typically does not cover indirect expenses due to a recall (e.g., third-party expenses, loss of profit and business interruption). A more comprehensive policy that covers both the direct and indirect costs of product recall is the accidental or product contamination policy. It also covers the grower against claims resulting from its own

² Third-party expenses may also include the liability the grower faces from downstream retailers whose brand names may be tarnished as a result of the contaminated fresh produce supplied to them.

PPT 8-25

unintentional distribution of an “unsafe” product. However, as with the product-recall policy above, this only applies to those growers whose product was contaminated. Those growers who suffered loss of profit or business interruption losses but were not contaminated (i.e., their product was just rejected as a precaution or due to a market scare) typically will not be covered under this policy.

Malicious Tampering Insurance

- Covers direct and indirect losses of product recall, but also covers losses from criminal actions of sabotage against grower.
- Intended for growers that were contaminated.

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PPT 8-26: Malicious Tampering Insurance

Insurance against malicious tampering is a more comprehensive insurance policy that covers losses from criminal actions of sabotage against the grower, as well as the losses covered in the accidental or product contamination policy (i.e., the indirect and direct recall costs). An example of a private company that sells this type of comprehensive coverage is MRM MacDougall Risk Management (Skees et al., 2001).³ In their insurance product, damages due to malicious product tampering are indemnified for up to \$75 million while damages due to accidental product contamination are indemnified for up to \$50 million.

PPT 8-26 (continued)

Under the accidental contamination part of the policy, losses are categorized into four areas: (1) recall expenses, (2) lost gross profit, (3) rehabilitation expenses and (4) crisis response. The second category covers loss for “12 months following discovery” or lost profit during a shorter period when sales revenue remains less than what could have been reasonably projected had the product contamination not occurred. Indemnities are even paid to rebuild the lost market share. Some examples of other companies offering product-recall insurance, accidental contamination insurance, malicious tampering insurance and combinations thereof are seen in Table 1. Again, the shortcoming of this product, as with the product recall and accidental contamination insurance policies, is that it only applies to growers whose product was contaminated.

Combination Policies

- Combines several different policies.
- For example, you can combine general farm liability and homeowner’s insurance if the family operations are smaller.
- Typically have lower premiums compared to the cost of purchasing separate policies.

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PPT 8-27: Combination Policies

Note that some insurance companies offer combination or package policies in which several different insurance policies are combined. For example, the general farm liability policy and/or commercial business can be combined with a homeowner’s policy. Sometimes this combination policy makes sense for a grower since some farms have both residential and commercial characteristics. It is especially appropriate for family and individually operated farms (rather than large corporate farming operations). Another potential advantage of combination policies is that typically it is offered at a better price than two policies purchased separately.

³ This policy is underwritten by Lloyd’s of London.

Excess/Umbrella/Surplus Lines of Insurance

- To provide for coverage when underlying available insurance is “lacking” – hard-to-place risks.
- Not regulated under state laws – premium rates not regulated and no guarantee protection from Insurance Guaranty Association.

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PPT 8-28: Excess/Umbrella/Surplus Lines of Insurance

Excess/Umbrella/Surplus lines of insurance are the terms used to describe various insurance coverage formats that provide protection from catastrophic loss when the underlying insurance is inadequate or lacking. For example, some risks may not be covered by North Carolina licensed insurance companies. The excess or surplus lines market is an insurance marketplace that is established for the purpose of insuring unique or hard-to-place risks. For growers of fresh produce, these excess or surplus lines can be purchased to obtain additional protection above and beyond the perils

PPT 8-28 (continued)

or losses covered under the policies above. Hence, an excess or surplus insurance policy can be tailored to protect against losses from outbreaks of food-borne illness even when the grower’s product is not contaminated. The disadvantage of these types of policies is that they are not regulated under state laws (i.e., premium rates are not regulated) and the Insurance Guaranty Association offers no guarantee protection for companies that sell these lines. Therefore, if the surplus lines insurer has financial difficulties, claims against the excess or surplus policy might go unpaid. Note that product-liability insurance in North Carolina sometimes falls under excess or surplus lines of insurance.

Adjusted Gross Revenue (AGR) or Adjusted Gross Revenue-Lite (AGR-Lite)

- Whole-farm revenue insurance based on tax forms
- Covers revenue losses below a guarantee – if losses are from insured cause of loss
- Can cover part of revenue losses of non-contaminated growers if losses are due to market fluctuation (industry-wide drop in prices due to a product warning)

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PPT 8-29: Adjusted Gross Revenue (AGR) or Adjusted Gross Revenue-Lite (AGR-Lite)

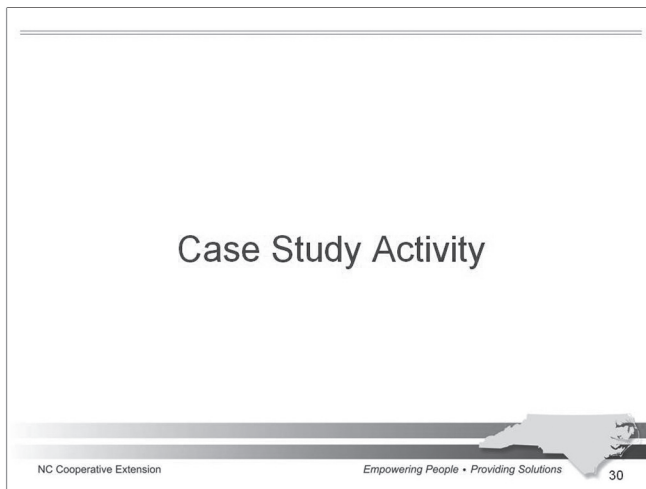
All the insurance policy options discussed above have been provided (and underwritten) by private industry, and these policies are not a part of the government-supported Federal Crop Insurance (FCI) program.⁴ Except for the excess/surplus lines, these privately provided insurance options only cover losses related to outbreaks of food-borne illness if the grower’s fresh produce was contaminated. As already mentioned, the insurance options above (except for the excess/surplus lines) do not apply to growers whose produce was not contaminated even if they suffered product-recall expenses such as loss of profit, and/or loss due to business interruption (i.e., their product was rejected as a precaution or due to a market scare).

⁴ The FCI program is overseen by the U.S. Department of Agriculture Risk Management Agency (USDA-RMA). This is a publicly supported, privately delivered program that provides different insurance products that help protect farmers from losses of yield or revenue due to natural perils such as drought, flood, etc. AGR and AGR-Lite are products offered under this program. AGR-Lite is the product currently available in North Carolina.

PPT 8-29 (continued)

Keep in mind that the Adjusted Gross Revenue (AGR) or the Adjusted Gross Revenue-Lite (AGR-Lite) insurance products offered under the FCI program can potentially cover some of the lost profits or revenues due to an outbreak of a food-borne illness even if the grower's product is not contaminated. This is because AGR and AGR-Lite are whole-farm revenue protection insurance plans. That is, they provide protection against low farm revenues due to unavoidable natural disasters or market fluctuations that affect income during the insurance year. They cover fresh produce as well as most farm-raised crops and animals (i.e., any source of non-value-added agricultural revenue in the farm). Thus, it can partly cover a catastrophic drop in revenues from fresh produce due to an outbreak of a food-borne illness. The revenue loss can either be from a precipitous price drop or a substantially low (or zero) demand for the fresh produce due to the outbreak.⁵

AGR and AGR-Lite use a grower's five-year historical farm average revenue as reported on the IRS tax return form (Schedule F or equivalent forms) and an annual farm report as a base to provide a level of guaranteed revenue for the insurance period. If actual revenue for the period falls under the revenue guarantee chosen by the grower, then the AGR or AGR-Lite policy will provide indemnity payments. Note, however, that there are limits to the amount of revenue that can be insured depending on the coverage and payment rates chosen. Hence, very large corporate farms with revenues above these limits may not qualify. For more details on AGR and AGR-Lite, please see the Risk Management Agency (RMA) factsheets about them (RMA, 2007).



PPT 8-30: Case Study Activity

Distribute HO 8-1: "Managing Liability and Risk: Case Study Activity" (see page 30)

Activity

Question to be decided: What market benefits will Jim and Betty Hodges gain from choosing to pursue GAPs certification when it is currently not required by their markets?

⁵ Note that this is our interpretation of the policy as it is written. However, there is a clause in the AGR-Lite policy that states that losses from the following may not be covered: "inability to market the agricultural commodities due to quarantines, boycotts, or refusal of any person to accept your agricultural commodities." We have contacted RMA for clarification of this issue and they agree that a product warning that causes a revenue reduction (due to an industry-wide drop in prices, for example) would be covered under AGR-Lite. The warning that caused low prices is a "market fluctuation" and should be covered by the AGR-Lite policy. However, we were not able to get a definitive interpretation of whether revenue losses from a direct government announced product recall fall under this clause.

Tort Definition

- A civil wrong
- A wrong for which the courts provide redress in a civil action

PPT 8-31: Tort Definition **A Legal Primer: Liability Basics**

Tort basics

A tort is a private or personal wrong for which relief may be sought in court. Relief is usually in the form of monetary damages but need not be solely monetary. For some torts, a court may be asked to provide injunctive relief. Injunctive relief consists of a court order that may be affirmative or negative in nature. The court may order the defendant either to do something or to refrain from doing something. Injunctive relief is enforceable through civil contempt, which generally consists of jailing the defendant until he or she complies. For producers of fresh produce, tort liability will almost always be monetary in nature. Where regulatory agencies seek injunctive relief, it is usually under their regulatory authority (granted by Congress or a state legislature) rather than through tort law.

PPT 8-32: Types of Torts

Where a tort is based upon a strict liability theory, there is liability without fault. To prove liability for a strict liability tort, the plaintiff need only prove that there was actual damage and that the defendant did the acts causing the damage. Those acts must be within the rather narrow range of acts to which strict liability applies. Strict liability applies only to two areas. The first is in cases in which the defendant was engaged in an ultra-hazardous activity. Such activities are rare and unlikely to apply to produce producers; however, strict liability is also applied to products under the laws of some states. For example, the

Types of Torts

- Strict
- Intentional
- Negligent

PPT 8-32 (continued)

courts of some states would find that a producer who sold tomatoes contaminated with *Salmonella* had produced a defective product and was liable for damages, even when the producer had made every effort to produce a safe product. Note that the wholesaler and retailer will share liability with the producer.

Intentional torts are those that result from an intentional or reckless act of the defendant. Few produce producers are faced with this type of tort; however, such a tort can be very devastating because the jury can award punitive damages in addition to actual damages. As an example, assume that a tomato producer knowingly uses a water source contaminated with raw sewage in his packing shed. Such a producer is acting with reckless disregard for the welfare of the consumers of his tomatoes and would likely be liable for both punitive and actual damages. Whereas actual damages are based upon the jury's best estimate of the actual economic harm, there is little relationship between the actual harm caused and the level of punitive damages. Juries may generally set punitive damages at whatever


PPT 8-32 (continued)

level they believe is sufficient to punish producers for their bad acts.

Negligent torts are fault-based torts. Some states such as North Carolina permit only the negligence theory in cases of products liability. North Carolina, however, would likely allow the intentional tort-based action described in the paragraph above despite barring the use of a strict liability standard in cases of products liability.

Products Liability

- Defective design/production
- Theories of liability
 - Strict liability (liability without fault)
 - Not available in North Carolina
 - Negligence (fault)



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PPT 8-33: Products Liability

Products liability is a subset of the broader area of tort liability. Liability arises when a product is either defectively designed or produced. Liability applies to every party in the chain of commerce from the point that the defect is introduced into the product. The liability is joint and several which means that the plaintiff may recover damages from any one or all of the parties. Of course, the plaintiff cannot recover more than his total damages. Among the defendants, one or more may have a right to contribution from one or more of the other defendants. For example, if a producer signed an indemnification agreement with the buyer, and the buyer was forced to pay damages to an injured consumer, the producer would be contractually liable to the buyer for what the buyer paid to the consumer (plus attorney fees under many indemnity contracts).

Products Liability (cont'd)

- Express warranties
 - Subject to negotiation
 - Interpretation
 - Usage of the trade
 - Course of dealing
- Implied warranties
 - Merchantability
 - Fitness for a particular purpose



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PPT 8-34: Products Liability (cont'd)

Products liability is an area of tort law that imports certain concepts from contract law. Among the most important of these concepts is the concept of warranty. While the breach of a warranty may be the basis for contractual damages in a lawsuit based upon the contract, the warranty may also help to define whether the product is defective for purposes of tort law. An express warranty is one that is stated; for example, a varietal statement such as "This is a German Johnson tomato." An implied warranty is one implied by law. For the purposes of products liability, there are two important implied warranties. The most important is merchantability. A product that is merchantable is one that is of the type and quality that the trade expects. Produce that is contaminated with a pathogen is never merchantable. An implied warranty of fitness for a particular purpose is created when a buyer tells the seller that he has a particular purpose for the product. This warranty is generally not so important for cases of products liability.

Strict Liability Torts

- Liability without fault
- Ultra-hazardous activity
- Duty to make safe
- Products liability

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PPT 8-35: Strict Liability Torts

As noted above, many states apply strict liability in tort to cases of products liability. If the product was defective, the producer is liable for all damages. The law to be applied will often be the law of the state in which the product is consumed, not the state of production. Even though North Carolina does not apply strict liability in tort, many of the states where North Carolina produce is shipped and consumed do apply strict liability in tort.

Intentional Torts

- Intent
- Punitive damages available
 - Unrelated to actual damages
 - Actual damages need not exist
 - Also available for quasi-intentional torts
 - Gross negligence/reckless disregard

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PPT 8-36: Intentional Torts

Here is an example to illustrate. Producer Bob draws water from a pond to use in his produce-packing operation. The pond is fed from a stream that runs through his pasture. Bob makes no effort to filter or otherwise disinfect the water prior to using it in his packing operation. Family Doe's daughter ate tomatoes from Producer Bob's farm and was sickened. She will never fully recover and the medical expenses that she is likely to expend over her lifetime as the result of eating Bob's tomatoes are expected to be \$2.5 million. The jury found that Producer Bob acted with reckless disregard for the safety of others because he knew that his practices were likely to cause serious injury to the consumers of his tomatoes. The jury awarded \$2.5 million in actual damages and \$10 million in punitive damages.

Negligent Torts

- Duty
- Breach of duty
- Proximate cause
- Actual damages

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PPT 8-37: Negligent Torts

Many cases of products liability will be based upon a negligence theory. All such cases, except for a few intentional tort cases, will be based on negligence in North Carolina because strict liability in tort is not available in products-liability cases in North Carolina. There are four elements that a plaintiff must prove in a tort in negligence. The first is duty. Produce producers have a duty to their customers to raise and pack produce that is not contaminated with pathogens or other dangerous material. If a producer fails to do that, he has breached his duty. There must be actual damages. And the breach of duty must have been a foreseeable cause of the actual damages.

Negligent Torts (cont'd)

- Defenses to negligence
 - Contributory negligence
 - Comparative negligence
- Statutory modification
- Liability waivers & disclaimers

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PPT 8-38: Negligent Torts (cont'd)

There are defenses available in negligence actions. The most important defenses are available where the plaintiff contributed to his own injuries, i.e., was partially at fault. In North Carolina, the defense is called contributory negligence and it is an absolute defense. Most other states use some variant of comparative negligence. In comparative negligence states, the court reduces the plaintiff's award based upon the degree to which the jury determines that he was at fault. Some industries, such as the equine industry, have been given reduced exposure to tort liability by statute.

PPT 8-38 (continued)

Liability waivers are used by some industries such as the downhill-skiing industry to shield the industry from liability for customers' injuries. Some sellers of goods also disclaim all warranties by making the sale an "as is" sale. The term "as is" as applied to a sale means that there are no warranties. Whether such an approach would work in the produce business is an open question. As a practical matter, use of liability waivers and disclaimers would probably face an insurmountable marketing hurdle—no one would buy produce under such conditions.

Statutory Liability

- Administrative (civil)
- Criminal
- Private right of action

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PPT 8-39: Statutory Liability

Regulatory liability

Tort liability is not the only source of liability for the produce producer. Regulatory agencies may impose fines and seek to prevent marketing of a product believed to be adulterated. At least theoretically, egregious behavior, usually resulting in death, could be criminally prosecuted. Some statutes may create a right in private parties to sue for damages. There is little or no state law that would give rise to administrative liability in North Carolina. At the federal level, the Federal Food, Drug, and Cosmetics Act obliges produce and other food producers to avoid introducing

PPT 8-39 (continued)

any adulterated food product into the market. This is the basic enforcement authority of the FDA that it uses in cases of food products, including produce, that are contaminated with pathogens.

There is an interaction with regulatory liability and tort liability. Where regulatory action is taken and a violation found, that violation may be used to prove the elements of duty and breach of duty.

The existence of both tort liability and regulatory liability poses a dilemma for the produce producer. Avoiding regulatory liability may require that certain records be kept; however, those same records may reveal a breach of duty that supports a finding of tort liability. With legal assistance the producer can determine those records that must be kept and ensure that information recorded does not support a tort action based upon negligence. One way to do this is to implement a system to follow-up on all problems identified and document the prompt correction of those problems.

Implementation of various certification programs such as GAPs may also require record keeping. The

PPT 8-39 (continued)

same considerations apply. Certification programs may provide evidence that the producer followed practices that make the producer an unlikely source of tainted produce. Thus the use of a certification program may be used, in part, to show that the standard of care has been met. However, the use of a certification in advertising has other implications. Such advertising may have the effect of raising the standard of care by increasing the expectations of consumers that the product is safe. Whether to advertise a certification or not is a marketing question to be answered by balancing increased sales from advertising the certification against the increased exposure to liability.

Liability for Acts of Independent Contractor

- Vicarious liability
 - Question of state law
 - General test: Was the activity inherently dangerous?
 - Distinguish from strict liability test.
 - IC must be negligent

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PPT 8-40: Liability for Acts of an Independent Contractor

Liability for acts of independent contractors

In general, one has no liability for acts of independent contractors unless the activity for which the independent contractor was hired was inherently dangerous. Unlike strict liability, the independent contractor must have been negligent (at fault) for the one who hired him to have vicarious liability. A person who hires an independent contractor may, however, be liable for the tort of negligent hiring if the person doing the hiring does not conduct adequate due diligence to determine whether the independent contractor is competent to do the job safely.

Burden of proof

- Civil
 - Preponderance of the evidence
- Criminal
 - Beyond a reasonable doubt

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PPT 8-41: Burden of Proof

Standard of proof and other considerations in liability lawsuits

Unlike a criminal prosecution where society is concerned about putting the innocent in prison, the standard of proof in a civil tort action is low. The plaintiff need only prove his case by a preponderance of the evidence—that is, more than 50 percent of the evidence favors the plaintiff. Ties go to the defendant. In cases of produce contaminated with a pathogen, it is often unclear where the contaminated produce originated and who in the supply chain was responsible for the contamination. To win, the plaintiff need not prove with scientific certainty that the suspect produce caused the illness, was produced on the defendant's farm or that the contamination was introduced by the defendant. It is sufficient that the plaintiff introduce some evidence as to each of these points that the defendant cannot successfully refute.

Given the bad publicity associated with a trial (and resultant loss of markets), the low standard of proof that a civil plaintiff faces and the risk and

PPT 8-41 (continued)

uncertainty associated with any jury trial, it is no surprise that more than 95 percent of all tort actions are settled before trial. A wise defendant often settles even when certain that it was not his produce that caused the harm. A jury may not see it that way.

Activity

Distribute “Post-test and Module Evaluation”



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– N.C. Department of Insurance

For assistance finding insurance, regularly licensed companies and surplus lines:

– MAP (919) 733-9811

For help with unauthorized insurance:

– 1-800-546-5664 Consumer services
– (919) 733-7487 Agent services

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Handout 8-1
Module 8: Managing Liability and Risk
Case Study Activity

Question to be decided: What market benefits will Jim and Betty Hodges gain from choosing to pursue GAPs certification when it is currently not required by their markets?

Jim and Betty Hodges grow five acres of tomatoes, two acres of cucumbers and five acres of cantaloupes. Because the tomato and cantaloupe crops are more frequently associated with outbreaks of food-borne illness, the couple is weighing the costs and benefits of seeking a GAPs audit to obtain GAPs certification.

Current markets: The Hodges sell at three different farmers' markets within a 50-mile radius of their farm. None of the markets currently require GAPs certification; one market requires products-liability insurance. They purchased a policy giving them \$1 million coverage, at an annual cost of \$800. They already use drip irrigation from well water, so they will not need to make changes to their water system to be GAPs-compliant. Becoming GAPs-certified will not replace the need for coverage for products liability.

Initial Costs of Certification	
Development of forms/paperwork procedures (does not include repeat copying expense)	\$500
Initial training time for four employees (est. @ 10 hours @ \$9/hour)	\$360
Certification audit (first year may be offset by NCD&CS grant, if available)	\$400
Estimated additional administrative time for owners (billed at \$20/hour; 7 hrs/wk/24 weeks)	\$3,360
Purchase of used cooler that meets certification requirements	\$3,500
Misc. other costs	\$1,000
Total Initial Certification Cost Estimates	\$9,120

Current Annual Revenues	
Market #1	\$30,000
Market #2	\$27,500
Market #3	\$40,000
Total Annual Revenue	\$97,500

Current costs, including wages and salaries for the Hodges, represent 75 percent of their revenue, or \$73,125. The addition of the first year's certification costs will reduce net profits by another \$9,120, making total annual costs in Year 1 equal to 84 percent of revenues.

Recurring costs in subsequent years will continue to be annual audit costs, administrative costs and employee training.

Non-financial benefits to the Hodges are the implementation of a more structured management system that would improve worker productivity. Another benefit is to have GAPs practices in place so that when (or if) GAPs certification becomes a requirement in one or more markets, they are ahead of the game.

Another market opportunity is that the GAPs certification may create an opportunity to pursue an additional marketing claim and charge a higher price for their produce, although this also creates another layer of liability for them should someone identify their produce as the source of a food-borne illness.

We'll discuss this possibility in the final segment of the presentation. In the meantime, what would you recommend the Hodges do?