



Interviews with Farmers about Good Agricultural Practices (GAPs): Preliminary Findings

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Background

- 1998 FDA guidance to industry: "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables."
- Foundation for a variety of practices and programs commonly referred to as Good Agricultural Practices (GAPs) and Good Manufacturing Practices (GMPs).



There is evidence that growers have not fully implemented the GAPs to reduce production risks, despite intensive GAPS training programs and other efforts to promote adoption of GAPs.

Recent GAPS Legislation and Activities

- Food Safety Enhancement Act
- Food Safety Modernization Act
- USDA & FDA working together:
 - USDA evaluating a proposed marketing agreement
 - FDA developing a proposed produce safety regulation

Why Is Research on Produce Safety Important?

- Nutrition
- Illness and Death
 - 1996-2008: 82 produce* outbreaks reported
 - 10,540 illnesses
 - 15 deaths
- Economic Disruption
 - Tomato industry losses – \$200 million
 - Spinach industry losses – \$120 million

*Excludes Sprouts

Produce Contamination Sources

- Home
- Retail
- Processor
- Packer
- Transportation
- Farm

Research Objectives

- To obtain information about growers' awareness of the FDA GAPs;
- to assess knowledge, attitudes, feelings, and self-reported practices with regard to the FDA GAPs;
- and to more fully understand the barriers and constraints associated with GAPs implementation;

in order learn how best to communicate with farmers about microbial risk reduction on the farm.

Research Method

- Qualitative
 - Convenience sampling
 - In-depth interviews
 - Exploratory/descriptive
 - Identify primary influences on decision-making and behavior

Sample

1. Farmer/Growers

<i>Location</i>	<i>Leafy Greens</i>		<i>Tomato</i>	
	Telephone	On-site	Telephone	On-site
California (and/or Arizona)	10	2		
Florida			10	2

- Revenue > \$250,000.
- Interstate sales

2. GAPS Trainers and Auditors

- 24 telephone interviews

Interview Guide

- Structured, Open-ended
- Gentle introduction to topic
 - Let's begin by talking generally about the kinds of farming that you do.
- Questions about risk reduction
 - Now I'd like to ask you about how contamination can be prevented.
- Knowledge questions
 - How would you know if you had contamination on your farm?
- Risk Communication
 - Where do you go for general information, not specific to contamination, about ways to improve how you run your farm?

Sampling of Grower Interview Responses

A “Quick and Dirty” Review

Awareness of FDA GAPS Guide

	Leafy Greens	Tomatoes
Yes	4	3
No	1	6
Number of Interviews Reviewed	5	9

“Believe me, the customers nowadays, yes they want a quality product, but when they send their people out here to check us out and see if we’re going to supply product to them, their first question isn’t ‘how is your product doing’? No. Their first question is ‘how is your food safety program?’”

50 Year Old Male, Leafy Green Grower

Responses, cont.

GAPS Guide Awareness, cont.

“The CA/AZ leafy greens program are both based on the FDA’s guide for reducing microbial risk and cited in their literature as something that you should use. Our own farming operations have been using this since it first came out 10 years ago or so. We have been using that from the very beginning of what we looked for when we first designed our first food safety program. Since then every customer has their own set of GAPs.”

50 year old female, leafy greens grower

“The FDA Guide to Minimizing Microbial Contamination. It’s just a basic guideline. The FDA GAPs are just the basics. You have to build way beyond that. It’s an outline, but the FDA GAPs are a very good outline and a starting point and primarily we use them because we’re going to have to deal with them eventually [laugh].”

40 year old male, leafy greens grower

“I thought it would be a whole lot of bureaucratic stuff, or it would just be a waste, it wouldn’t be very good.”

40 year old male, tomato grower

Conclusion

- Analysis finished in Summer 2010
- Results useful for any entity that wants to communicate with farmer/growers.
 - Will know what they know about GAPS
 - What they believe about GAPS
 - The extent to which food safety is a priority
 - Best ways to communicate

Potential Uses for Data

- Enlighten FDA
- FDA communications explaining new law
 - Keep in mind when designing booklets, pamphlets, displays, presentations, workshops
- Non-government trainers materials and methods

Thank you!