

# CTAHR's role with FSMA and Good Agricultural Practices (GAPs)

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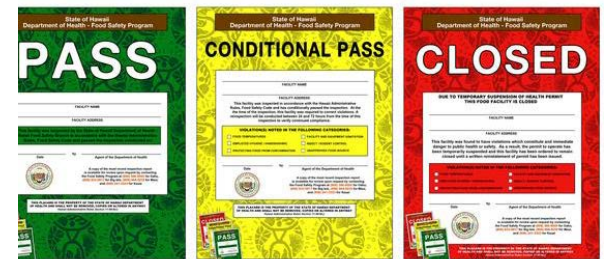


**Cooperative Extension Service**

College of Tropical Agriculture and Human Resources  
University of Hawai'i at Mānoa

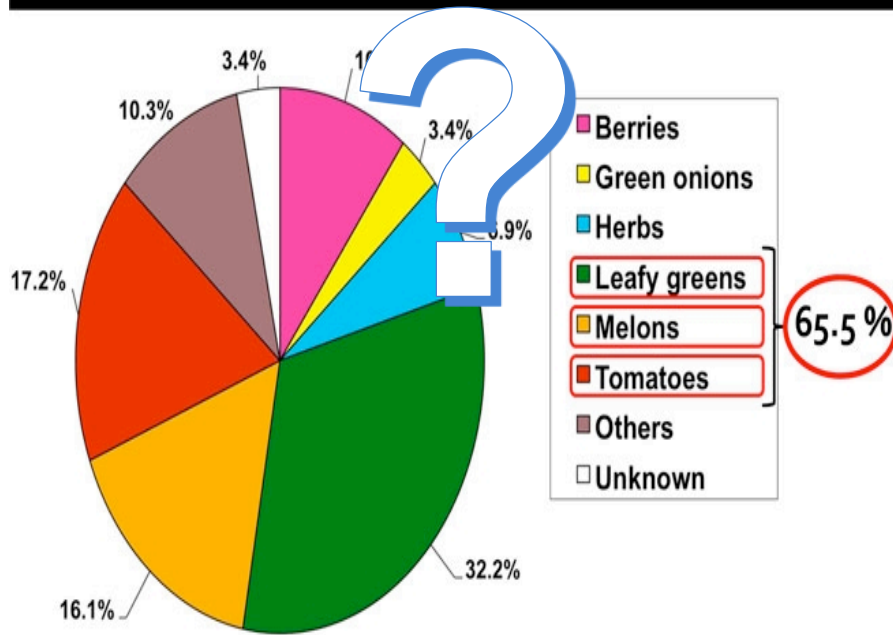
# Safe Food Handling is a Public health Concern

- \* Standards are not new to food related businesses
- \* To prevent and reduce illness, disability, and death due to eating foods contaminated with physical, chemical, and microbiological hazards on farm



# Why

Types of produce **Associated with Outbreaks, 1996-2009 (N=87)**



Source Credit FDA/CFSAN 2011

46% of all foodborne illnesses that led to hospitalization or death between 1998-2008 attributable to fresh produce

Source: U.S. Center of Disease Control and Prevention, March 2013





# Impacts Hawaii's Tourist Economy and our families



[http://www.tripadvisor.com/LocationPhotos-g60982-Honolulu\\_Oahu\\_Hawaii.html#40821049](http://www.tripadvisor.com/LocationPhotos-g60982-Honolulu_Oahu_Hawaii.html#40821049)



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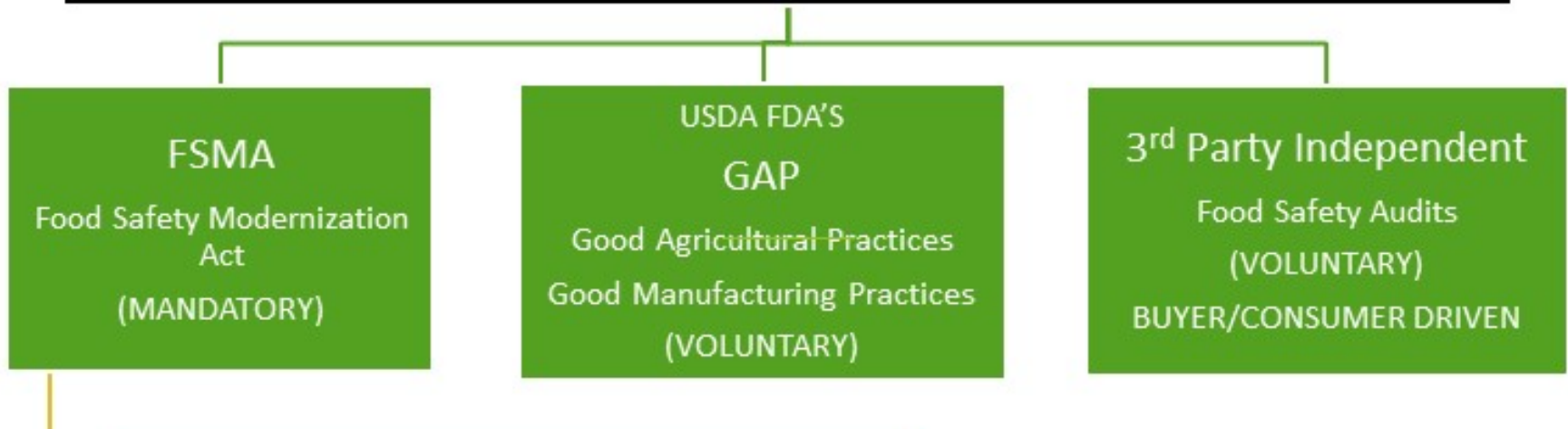
[http://darqlabs.files.wordpress.com/2011/07/img\\_6876.jpg](http://darqlabs.files.wordpress.com/2011/07/img_6876.jpg)



<http://www.theeventnews.org/sites/default/files/potluckweb.jpg>

# FSMA-GAP-Audits

## HAWAII FARM FOOD SAFETY PROGRAM-EDIBLE CROPS OVERVIEW & OUTREACH



# Food Safety Modernization Act (FSMA) Produce Rule key points

- \* Produce Safety Rule to be final on October 31, 2015
- \* Includes standards for growing, harvesting, packing, and holding produce
- \* Water quality
- \* Manure application – meets National Organic Program standards, delete compost pre-harvest interval
- \* Excluded farms and procedures for withdrawing exemptions
- \* Wildlife management does not require excluding animals from outside growing areas or destroying animal habitats

# Compliance Schedule

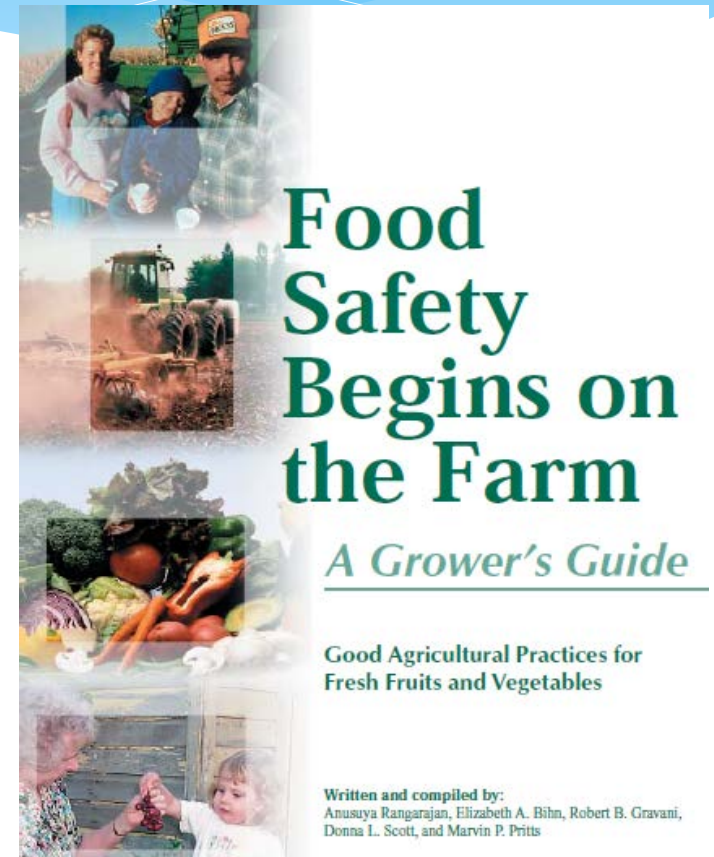
- \* Very small farm, \$25,000 - \$250,000 annual produce sales, **4 years to comply**
- \* Small farm, >\$250,000 - \$500,000 produce sales, **3 years to comply**
- \* All other farms, **2 years to comply**



# Adopting GAPs Benefit Growers

GAPs offer science- and experience-based **risk-reduction guidelines** that align with FSMA requirements.

- \* Harm reduction food safety plan
- \* Focus on key risk areas
- \* Provides marketing opportunities
- \* Satisfaction of providing safe, fresh, local produce





# Key GAP areas

- \* Site history
- \* Worker hygiene/ sanitation
- \* Water quality & application
- \* Domestic & wild animals
- \* Safe use of manure, compost & fertilizers
- \* Safe pest control and record keeping
- \* Traceback
- \* Agrosecurity



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# Personal Hygiene



**Wash hands before and after  
Bathroom, eating, smoking, spraying, etc**

# Personal Hygiene

- \* Check employee health, sick employees should not handle food
- \* Blood or other body fluids on produce is an automatic failure of audit
- \* Treat and cover open cuts and sores
- \* Have Standard Operating Procedures (SOPs and records in your food safety plan)





# Water Quality

- \* Assess the quality of water
- \* Match irrigation method to water quality and use (e.g. potable water for overhead irrigation, pest control and washing)
- \* Match water quality to crop (e.g. non-potable water for irrigating orchard crops)
- \* Test your water, more often if the source is more risky (surface, non-potable, catchment, etc.)



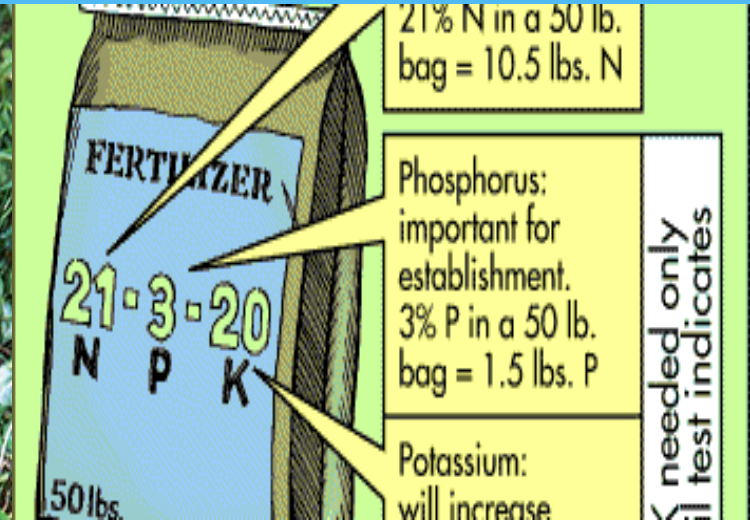
# Domestic and Wild Animals



Keep animals out of the food production area



# Manure, Compost and Fertilizers





# Pest Control and Recordkeeping



**The Label is the Law**





# Harvest and Post-Harvest Handling

- \* Clean hands, tools, harvest equipment, and containers
- \* Exclude drops and damaged product
- \* Wash with potable water





# Traceback

- \* Traceback - date and field of harvest
- \* Traceforward - who received your product





# Agrosecuirty

- \* Limit access to farm, water sources, and chemicals
- \* Report unusual activity
- \* Use Signage



# 3<sup>rd</sup> Party Independent Audit

- Buyers are requiring 3<sup>rd</sup> party audits
- Primus audit was chosen by your company
- GAP Guidelines
- Based on a point system

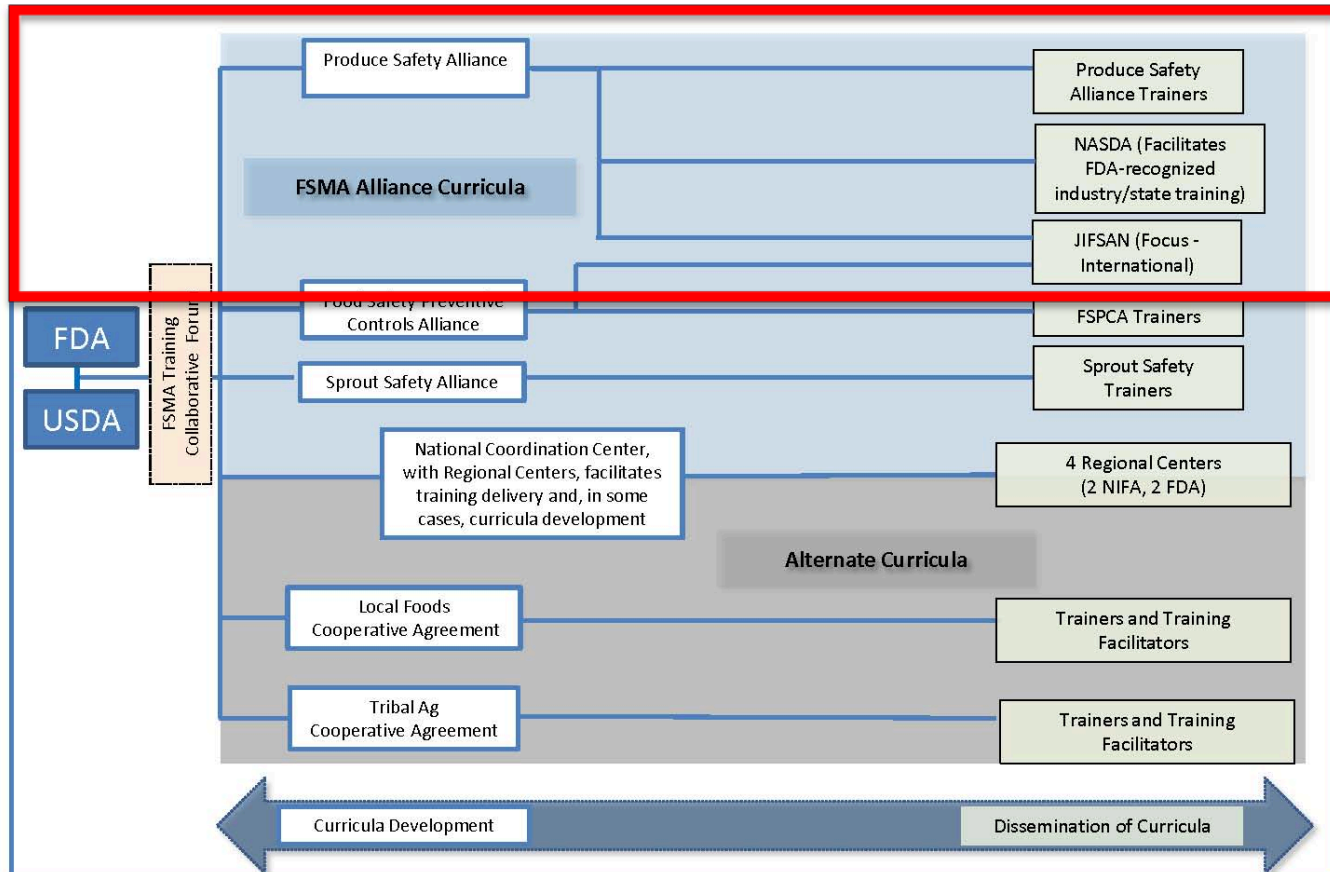




# Moving Hawaii's Growers Forward

## FSMA Framework for Industry Curriculum Development and Dissemination

October 2015

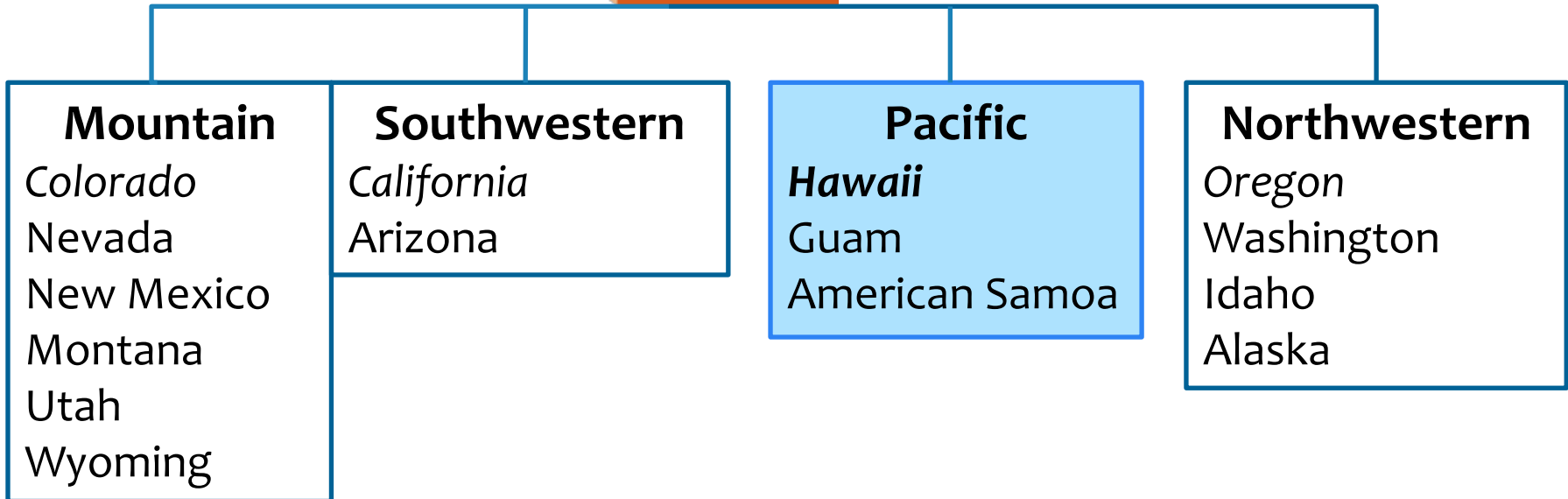


This is not an all-inclusive list of entities that will be developing training curricula and delivery for domestic and foreign food businesses.

# Next Steps



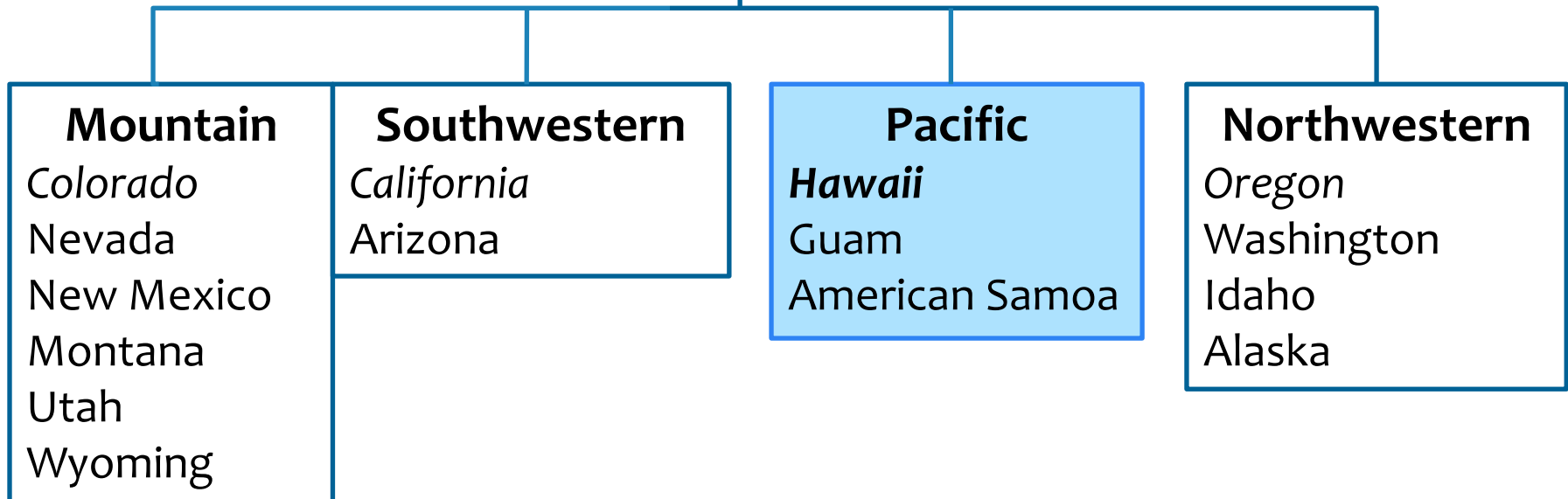
Western Training, Education,  
Extension, Outreach, and Technical  
Assistance Center to Enhance  
Produce Safety



# Western Training, Education, Extension, Outreach, and Technical Assistance Center to Enhance Produce Safety

**Oregon State**  
UNIVERSITY

**Extension Service**



# Food Safety is a Team Effort!



## CTAHR:

- \* Provide statewide educational workshops for all growers and develop educational tools
- \* Help build capacity by providing GAP training for other educators/trainers Develop additional education and training tools

## HDOA:

- \* Develop audit capacity statewide (USDA)
- \* Resource support if available

Hawaii Farm Bureau Federation, Hawaii Farmer's Union United, etc.:

- \* Provide outreach support to members and potential growers

## HAWAII PRODUCE GROWERS:

- \* Adopt GAPs to provide safe, fresh produce



# CTAHR GOOD AGRICULTURAL PRACTICES EDUCATION

Science-based education for Hawaii'i growers and handlers.

HOME

OUTREACH EDUCATION

TOOLS & PUBS.

OUTREACH EDUCATORS

AUDITED FARMS/COMPANIES

RELATED LINKS

HI OUTBREAKS/RECALLS

PATHOGEN SCI.



WELCOME TO CTAHR

Good Agricultural Practices Education

<http://manoa.hawaii.edu/ctahr/farmfoodsafety/>

\* **Cornell GAPs** <http://www.gaps.cornell.edu>

\* **Produce Safety Alliance (PSA)**  
<http://www.producesafetyalliance.cornell.edu>

\* **FDA Produce Safety Rule**  
<http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm304045.htm>