



# Farm to Fork: Food Safety in the Supply Chain Forum 4/26/17

CENTER OF EXCELLENCE  
HOMELAND SECURITY-EMERGENCY MANAGEMENT

---

## Securing the Supply Chain Forum: A Global Perspective of Food Protection to Secure Our Agriculture Economy

### Background

The Centers of Excellence for Global Trade & Supply Chain Management and Homeland Security Emergency Management collaborated to conduct a Forum around the educational and business sector of the Supply Chain industry. The purpose of the event was to be a follow-up of the April 13, 2016 ‘Securing the Supply Chain Forum’. This year’s Forum was centered on the topic of ‘Farm to Fork: Food Safety in the Supply Chain’. Food safety is everybody’s business, not just the end user, the retailer or the wholesaler, but the whole food system needs to have ownership of food safety. The Forum discussed the challenges, critical issues and important roles of all stakeholders: government, business and industry, and academia. Food protection is at the intersection of food safety, food quality, and food defense. The Forum increased awareness about the potential targets and impacts of food safety emergencies. The Forum provided an opportunity for public and private industry experts, along with educators to gather for a dialogue of key issues impacting food defense and a discussion of the feasibility of a certificate program in food defense. Participants shared key “take aways” Including identification of need for future collaboration of the educational system, farms and other agri-businesses and government to work together to close training and education needs and gaps. Participants also talked about what an “eye opening” day and that food safety is a specialized field that needs a highly educated and trained workforce. One participant mentioned, “So much needed in the educational system that higher education will be employed for a long time.”

The information gathered from the Forum would then be used to work with the community and technical college programs in Washington State to help modify or add new curriculum that live up to the training and education requirements/standards of the industry.

### Overview

The Department of Agriculture is part of the Executive Cabinet Agency. Seven hundred and fifty-eight (758) full time employees work at the Department. Employees report to governor of Washington State. Around two hundred and twenty (220) of the staff are seasonal, primarily inspectors of fruit, vegetables etc. They help manage the registration of pesticides and inspect farms on how they are using pesticides.

The overall goal of the Department of Agriculture is to protect the state’s natural resources through the prevention and control of plant and animal diseases, support the marketing of the

state's agricultural products at the local, national, and international level and assure the safety, integrity, and availability of the food supply.

Important factors about the Department of Agriculture:

- Manages 23 commodity commissions.
- Between 36,000 to 39,000 farms in Washington state. Most are owned by families.
- \$2.4 billion value of apples (state's top crop).
- \$7.8 billion of food and agriculture products are exported overseas.
- 300 number of crops grown in Washington.
- 160,000 people employed in agriculture and food industry. Most are family waged jobs.
- \$10.7 billion market value of crops and livestock.

Dept. of Ag stated that they had no operational role around climate change but they do admit that Water Resources as an issue is huge. In talking with many folks in different state agencies, it doesn't seem like state government has a comprehensive climate change strategy that sorts out priorities and protocols around resources like water if those resources should become scarce or non-existent in some areas due to climate change. Even from a climate change adaptation standpoint there doesn't seem to be a coordinated, integrated plan for our state yet we live in a state where at least our Governor embraces the science of climate change.

## Key Findings

**Top trading partners:**

- 1.) Japan
- 2.) Canada
- 3.) China
- 4.) Philippines
- 5.) South Korea

**Top Export Products:**

- 1.) Wheat \$1.8 billion
- 2.) Fish and Seafood
- 3.) Fresh Apples
- 4.) Frozen Potatoes (French Fries)

**Major trade issues:**

China: Phytosanitary ban on U.S. fresh potatoes

China: Phytosanitary import prohibition on U.S. fresh blueberries

Korea: Phytosanitary import prohibition on U.S. apples

Promote International Trade through NAFTA and TPP.

Promote domestic programs such as farm-to-market and farm-to-school.

Maintain commitment to research.

### **Immediate concerns for Washington State Department of Agriculture:**

- Controlling invasive pest: apple maggot and gypsy moth.
- Managing dairy nutrients and pesticides: improve water quality.
- Preventing destructive diseases: avian influenza, livestock traceability.
- Keeping food sources safe: new federal rules, emerging foods and products.

Produce Safety Rule requires government regulatory inspections of produce farms for food safety practices.

### **Growth pressures:**

World-wide population growth and food supply

Washington state population increasing: increased competition – land and water resources; urban/rural interference.

Farm labor availability: Labor supply getting older and fewer to replace. Moving to other industries (construction, hospitality, food service, and manufacturing). Other issues: technology.

### **Focus on Prevention**

FDA Food Safety Modernization Act (FSMA): Regulation that congress passed due to a lot of issues i.e. health related to food.

About 48 million (1 in 6 Americans) get sick each year. 128,000 are hospitalized and 3,000 die.

Children, pregnant women, older individuals, those on chemotherapy are more susceptible to food-borne illnesses. A food-borne illness is not just a stomach ache – it can cause lifelong chronic diseases such as kidney failure.

A lot of food-borne illnesses occur, but seldom are they reported.

Growing population (about 30%) of individuals are especially “at risk” for food-borne illness.

More food is in the marketplace which means new hazards are not previously seen.

FSMA is historic. Involves creation of a new food safety system. Broad prevention mandate and accountability. New system of import oversight. Emphasizes on partnerships. Emphasizes farm-to-table responsibility.

General approach to preventive controls

- 1.) Identify Hazard
- 2.) Understand Cause
- 3.) Implement Preventive Controls
- 4.) Monitor Effectiveness
- 5.) Review & Adjust

Put more emphasis on the hazard and evaluate how the hazard could affect the food safety.

More training and documentation when it comes to sanitation to help with food safety.

Establish science-based, minimum standards for the safe production and harvesting of fruits and vegetables.

Majority of product is distributed directly to consumers or farmers' markets and restaurants either intrastate or within 275-mile radius.

## **Educational Gaps and Analysis**

- There is a need for more folks to have the skills to work on the policy side to improve food security.
- There is a need for Federal legislation that limits delay times in loading and off-loading trucks that contributes to food becoming spoiled or compromised due to temperature issues as trucks are asked to sit with doors open.
- Colleges need to teach soft skills like critical thinking and problem solving.
- There are lots of opportunities for incumbent worker training. Industry needs to be reaching out to local colleges and offering to become involved in providing insight into what training/education/skills are needed.
- Human trafficking: The trucking industry now has a campaign similar to the DHS "See Something, Say Something" public awareness campaign. People need to report those instances that indicate human trafficking is underway.
- Develop new industry position called Food Security Engineer combining strong science foundation, knowledge of supply chain, safety & security like OSH, and basic AG. It could be certificate or 2 year degree.

### **Opportunities for CTC's to offer training in:**

Sanitary Equipment Design

Food Safety & Hazards

Allergens?

Recalls

Traceback

Good Manufacturing Practices

## Emerging Transport Technology Procedures (Driverless Trucks)

\*\*Online Training specifically is useful

### Takeaways from Attendees

- Liked the topic felt it was informative
- The Supply Chain is both secure and vulnerable at the same time.
- Learning opportunities and TSA play a great part.
- Collaboration and working together across company/customs/farm lines is needed.
- There are a wide range of topics regarding education and degree, which is exciting.
- Integration making it work and closing gaps is necessary.
- Cooperation & Integration
- It is a complex problem, maybe a degree called Food Safety Engineer is needed
- Retaining and keeping students involved in the farm industry. Retention rate concerns
- Vulnerability and complexity
- Importer requirements as well as resources to the public is critical
- Resources are needed to the plethora of problems.
- Complexity and director increase systems thinking.
- Army gets pigeon holed and needs to pay attention to civilian education
- What can I do as a role supporter? Use the resources at Highline
- Learning about connectivity/gaps/climate change impacts
- Full scale spectrum of food safety is needed
- Very eye opening topic today\
- There is opportunity and need for technology to catch up
- Make “Agriculture” Sexy
- Food safety is a specialized field that needs highly educated and trained workforce.
- Blow the whistle and sue companies for wrong doings and practices
- Mistakes spiral out of control –listen to warning signs and catch them quickly
- Trust is essential for the public.
- So much need in the educational system. Higher education will be employed for a very long time.
- Over 400 food banks in the area. 1 out of 5 citizens use them. 50% that use food banks are children and elderly.

### Conclusion

The Centers of Excellence for Global Trade & Supply Chain Management, Homeland Security Emergency Management, and Agriculture will be working together with the Department of Agriculture and Washington State University to address the identified education and training needs in this industry area in food safety and defense. Full video and summary will be posted on

the Center of Excellence – Homeland Security Emergency Management's Video Library at  
[www.COE-HSEM.com](http://www.COE-HSEM.com)