
Food Hubs and Food Safety Regulations

A Federal and State of
Colorado Regulatory
Overview

October 2011

Strengthening the regional food system network is a leading objective for the Healthy Weld 2020 program's goal of increasing healthy food access to Weld County's underserved residents. Healthy Weld 2020, in partnership with local food system leaders is working to create infrastructure to support a fully-functioning producer food hub model that can be replicated throughout Colorado. Understanding food regulatory requirements is critical to the model's success. This overview of Federal and State of Colorado food safety regulations is intended to provide anyone working to improve healthy food access guidance on the food safety regulations that may be required.

Project Background

During 2010, Weld County Department of Public Health and Environment participated in a Northern Colorado Regional Food System Assessment with Larimer County, Colorado State University Department of Agriculture Resources, and Colorado State University Extension in Boulder County to better understand the components of our food system and how that relates to the economic, social and physical health of the region. Study results can be found at this link: www.larimer.org/foodassessment. Assessment included identifying current food system inputs, gaps, and opportunities for growth. Connecting small to mid-sized producers to local markets was an identified gap in the Assessment.

Organizations

Healthy Weld 2020 is a Colorado Health Foundation grant funded program at the Weld County Department of Public Health & Environment. Healthy Weld 2020 takes a leading role in obesity prevention initiatives in the county by creating and supporting healthy environments where residents live, learn, work and play. For more information: www.HealthyWeld2020.com

Colorado Health Foundation invests resources in programs that promote obesity and associated chronic disease preventative measures, including access to nutritious food. Colorado Health Foundation recognizes that access to nutritious food is one of the key components to help Colorado residents staying healthy. For more information: www.ColoradoHealth.org

Acknowledgements

Healthy Weld 2020 would like to thank the many organizations contributing to this document. *Food Hubs and Food Safety Regulations* was authored by Pam Smith Wolsey, Happy People Enterprises, LLC. Special thanks to Dan Joseph, Food Safety Program Coordinator, Weld County Department of Public Health & Environment for his review and feedback.



The Colorado Health Foundation™



Summary of Food Hub Food Regulatory Chain of Authority

Food safety is a big concern in the creation of a food hub. Fresh fruit and vegetable growers and those working with them are hearing a lot about GAP and GHP standards. Healthy Weld 2020 and Real Food Colorado are partnering to implement a Farm to School and Producer Food Hub to allow small to medium sized farms to distribute locally grown products to local schools, institutions and retail establishments. One part of helping local producers to participate in the food hub is to meet the food safety assurances buyers are requesting or requiring. This summary focuses on understanding the Federal and State food safety rules currently in place to achieve compliance.

HACCP (Hazard Analysis Critical Control Point) is a food safety management system that is used in the food processing industry for assessing the risks of food contamination while the product is in their possession. A HACCP Plan is a written plan for implementing monitoring procedures to minimize the risks of contamination. Through FDA and USDA regulations, HACCP is mandatory for meat, poultry, fish, seafood, and juice processing and packaging plants. For processing all other food products, HACCP is voluntary, although encouraged.

Prerequisite Programs (also known as food safety plans) addressing other segments of the food supply chain (agricultural practices, harvesting, field packing and transportation practices, traceability, and vendor certification) are necessary for HACCP to be successful.¹

Regulatory Overview

Federal guidelines and State of Colorado regulations exist for the proper handling of fresh fruit and vegetables in different steps along the food system chain. Where State level regulations are in place, they supersede Federal guidelines. Local county regulations could also exist within the State of Colorado that might either supplement or supersede State regulations, depending on how they are written.

Federal Regulatory Overview

FDA Food Drug and Cosmetic Act (the Act) is a set of laws passed by Congress in 1938 giving authority to the U.S. Food and Drug Administration (FDA) to oversee the safety of food, drugs, and cosmetics. The Act has been amended many times over the years as necessary to protect against modern-day threats.

The [FDA Food Drug and Cosmetic Act \(the act\)](#)² defines raw agricultural commodities in section 201(r) as:

(r) The term "raw agricultural commodity" means any food in its raw or natural state, including all fruits that are washed, colored, or otherwise treated in their unpeeled natural form prior to marketing.

It is important to note this definition because other Federal and State of Colorado regulations reference this definition when exempting certain types of activities from their guidelines or regulations. Specifically for the discussion of this document, raw agricultural commodities are exempt from 1) the FDA Good Handling Practices - Fruit and Vegetable Processing Guidelines and 2) Colorado Department of Public Health & Environment Wholesale Food Regulations. Both of these are discussed further.

USDA Good Agricultural Practices and Good Handling Practices (GAP/GHP) Guideline Overview

¹ HACCP Overview document from University of Florida IFAS Extension <http://edis.ifas.ufl.edu/fs122> (accessed September 19, 2011)

² <http://www.fda.gov/RegulatoryInformation/Legislation/FederalFoodDrugandCosmeticActFDCA/default.htm> (accessed September 19, 2011)

These GAP/GHP recommendations cover three main areas:

- Good Agricultural Practices, examining farm practices;
- Good Handling Practices, concentrating on packing facilities, storage facilities and wholesale distribution centers;
- Food Defense protocols being utilized in all parts of the food chain.

The USDA offers a third party audit verification program for fruit and vegetable producers who are seeking certification that they are adhering to the recommended GAP/GHP practices. Many produce buyers from grocery stores, restaurants, and distributors are now requiring proof of GAP compliance, through third party inspections, as a condition of purchase. In Colorado, the Department of Agriculture is the in-state partner with the USDA for the USDA Fresh Produce Audit Verification Program (GAP/GHP). The audit is based on the following guidelines:

Good Agricultural Practices – Farm Practice Guidelines

The United States Department of Agriculture (USDA) and the Food and Drug Administration (FDA) issued recommendations for good agricultural practices (GAP) and good handling practices (GHP) in the Food and Drug Administration's [Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables](#). (Oct 1998)³. This guidance document ("the guide") addresses microbial food safety hazards and good agricultural and management practices common to the growing, harvesting, washing, sorting, packing, and transporting of most fruits and vegetables sold to consumers in an unprocessed or minimally processed (raw) form. (pg1)

Good Handling Practices - Fruit and Vegetable Processing Guidelines

In March 2007, the FDA issued guidelines for fresh-cut fruit and vegetable processing. ["\(Draft Final\) Guide to Minimize Microbial Food Safety Hazards of Fresh-Cut Fruits and Vegetables"](#)⁴. **Section II, Scope and Use** states:

Fresh-cut Produce: This guidance covers fresh-cut fruits and vegetables that have been minimally processed (e.g., no lethal kill step), and altered in form, by peeling, slicing, chopping, shredding, coring, or trimming, with or without washing or other treatment, prior to being packaged for use by the consumer or a retail establishment. Examples of fresh-cut products are shredded lettuce, sliced tomatoes, salad mixes (raw vegetable salads), peeled baby carrots, broccoli florets, cauliflower florets, cut celery stalks, shredded cabbage, cut melon, sliced pineapple, and sectioned grapefruit. Fresh-cut produce does not require additional preparation, processing, or cooking before consumption, with the possible exception of washing or the addition of salad dressing, seasoning, or other accompaniments. As the fresh-cut produce market continues to evolve, the scope of this guidance may need to be modified to address new or novel types of products.

This document goes on to state ...

Fresh-cut Produce and HACCP Systems: A Hazard Analysis and Critical Control Point (HACCP) system is a prevention-based food safety system designed to prevent, reduce to acceptable levels, or eliminate the microbial, chemical, and physical hazards associated with food production (Ref. 6). One strength of HACCP is its proactive approach to prevent food contamination rather than trying to identify and control contamination after it has occurred.

Although HACCP is not currently required for the processing of fresh-cut produce, the United Fresh Produce Association recommends use of HACCP principles, and according to the association, many segments of the fresh-cut produce industry have adopted HACCP principles.

³ USDA Agricultural Marketing Service Fresh Audit Verification Program
<http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateN&page=GAPGHPAuditVerificationProgram>
(accessed September 16, 2011)

⁴ US Department of Health and Human Services, Food and Drug Administration, Center for Food Safety and Applied Nutrition
http://www2a.cdc.gov/phlp/docs/US%20FDA_CFSAN_Food%20Safet.pdf (accessed September 16, 2011)

State of Colorado - Regulatory Enforcement Overview

Food safety regulations originate at the Colorado Department of Public Health & Environment. There are currently no State of Colorado regulations at the grower level for growing, harvesting or transportation of fruits and vegetables off the farm. Depending on where the raw agricultural produce is transported 'to' along the food chain depends on where food safety regulations pick up in the food system.

This document will discuss three entry points in the food chain: 1) Direct to consumer, 2) Wholesale storage, manufacturing, packing, minimal processing, etc., and 3) Retail and institution outlets.

From farm to:

- A. **Direct to consumer** – through farmer's markets, or community supported agriculture (CSA) – No regulations *if* selling food items meeting the raw agricultural commodities (RAC) definition as noted in the FDA Food Drug and Cosmetic Act (the act) in Reference 2 above. If producer is selling other items (dairy, meats, breads, etc) they will be governed under the Colorado Retail Food Establishment Rules and Regulations as described in item C below.
- B. **Wholesale storage, manufacturing, packing, minimal processing, etc.** – [CDPHE Wholesale Food Regulations](#)⁵ apply. Regulation Subtitle: Applicable to wholesale manufacturers, packers, or holders of human food in Colorado. As stated in Item A above, Section 110.19 (a) of these regulations exempts the FDA Food Drug and Cosmetic Act (the act) defined raw agricultural commodities, with an expanded definition:

(a) The following operations are not subject to this part: Establishments engaged solely in the harvesting, storage, or distribution of one or more "raw agricultural commodities," as defined in section 201(r) of the act, which are ordinarily cleaned, prepared, treated, or otherwise processed before being marketed to the consuming public.

*The Wholesale Food **Regulations** supersede the Federal Good Handling Practices **guidelines** noted above.*

In summary:

- Producers who harvest, store and distribute raw agricultural commodities to the consuming public are currently exempt from food safety regulations.
 - The Colorado's Wholesale Food *Regulations* supersede USDA's Good Handling *Practices* portion of the GAP/GHP recommendations.
- C. **Retail and institution outlets** – (on or off premise human consumption, fee or no fee charged) restaurants, convenience stores, schools, markets, concession stands, etc. – food safety, handling, cooking, storing, etc, is governed by [Colorado Retail Food Establishment Rules and Regulations](#)⁶. Licensing, enforcement and inspections are conducted by the State or local Health Department. An important definition to remember is 'approved source'. This definition will be referred to several times throughout this document. Section 3-101 of the Retail Food Establishment Regulations states:

3-101 Food shall be in sound condition free from spoilage or contaminations and shall be safe for human consumption. Food shall be obtained from *approved sources* that comply with the applicable laws relating to food and food labeling. Food prepared in a private home shall not be used or offered for sale. (Emphasis added.)

Colorado Department of Education and HACCP Overview

⁵ <http://www.cdphe.state.co.us/regulations/consumer/WholesaleFoodColoradoRegs.pdf> (accessed September 27, 2011)

⁶ <http://www.co.weld.co.us/assets/B3adC815B1aA8db5Ad27.pdf> (accessed September 29, 2011)

Beginning in July 2006, by Federal mandate through [Public Law 108-265 Section 111 Food Safety](#)⁷, every public school that participates in the National School Lunch Program or School Breakfast Program is required to have a School Food Safety Program. Specifically, Section 111 (5) states:

“(5) SCHOOL FOOD SAFETY PROGRAM.—Each school food authority shall implement a school food safety program, in the preparation and service of each meal served to children, that complies with any hazard analysis and critical control point system established by the Secretary.”.

The school district Nutrition Services Department or other ‘school food authority’ will be responsible for developing that school’s HACCP plan in accordance with the Colorado Department of Public Health & Environment’s Retail Food Establishments Rules and Regulations (i.e. temperatures, cooling methods, food storage, etc.) that covers receiving, storing, preparation and serving of food. Additionally, each food service facility (production kitchen or serving site) must have a HACCP food safety plan on site. If (potentially) a Charter School is not part of a larger School District, their food authority will be responsible for developing their HACCP plan. Schools can implement procedures and protocols that meet their requirements and preferences provided they are in compliance with the Retail Food regulations. Multiple schools and/or school districts could likely mean multiple requirements for receiving fruits, vegetables and other food items.

In review of online [Colorado Department of Education HACCP training materials](#)⁸, the HACCP Participant Booklet’s Prerequisite Program Checklist includes a section for (food) Supplier Control. The Supplier Control prerequisite section requires that there be a “Letter on file from all distributors stating that they have a HACCP program or use good food safety procedures.”

It’s important to remember that **where** the food moves to in the food chain will determine the level of food safety assurance that has to be met at the farm. For instance, a producer selling directly to the consumer (through a Farmer’s Market or CSA model) does not have to show any food safety assurance by law. However, to sell to a grocery store, restaurant or school, the producer will likely have to show the receiving retail food establishment (through a food safety verification certificate, HACCP plan or some other means) that the farm operations are using good food safety procedures. For a producer selling to or through a Food Hub (depending on the food hub business model), they will likely have to show some type of food safety plan before the Food Hub receives the product and can sell to the retail food establishment. The Food Hub will be the one to determine what type of food safety assurance is acceptable. (See the diagram below to help understand the regulatory chain of authority from Farm to Retail.)

⁷ http://www.fns.usda.gov/cnd/governance/legislation/historical/pl_108-265.pdf (accessed September 29, 2011)

⁸ <http://www.cde.state.co.us/cdenutritran/nutriHACCPplan.htm> (accessed September 27, 2011)

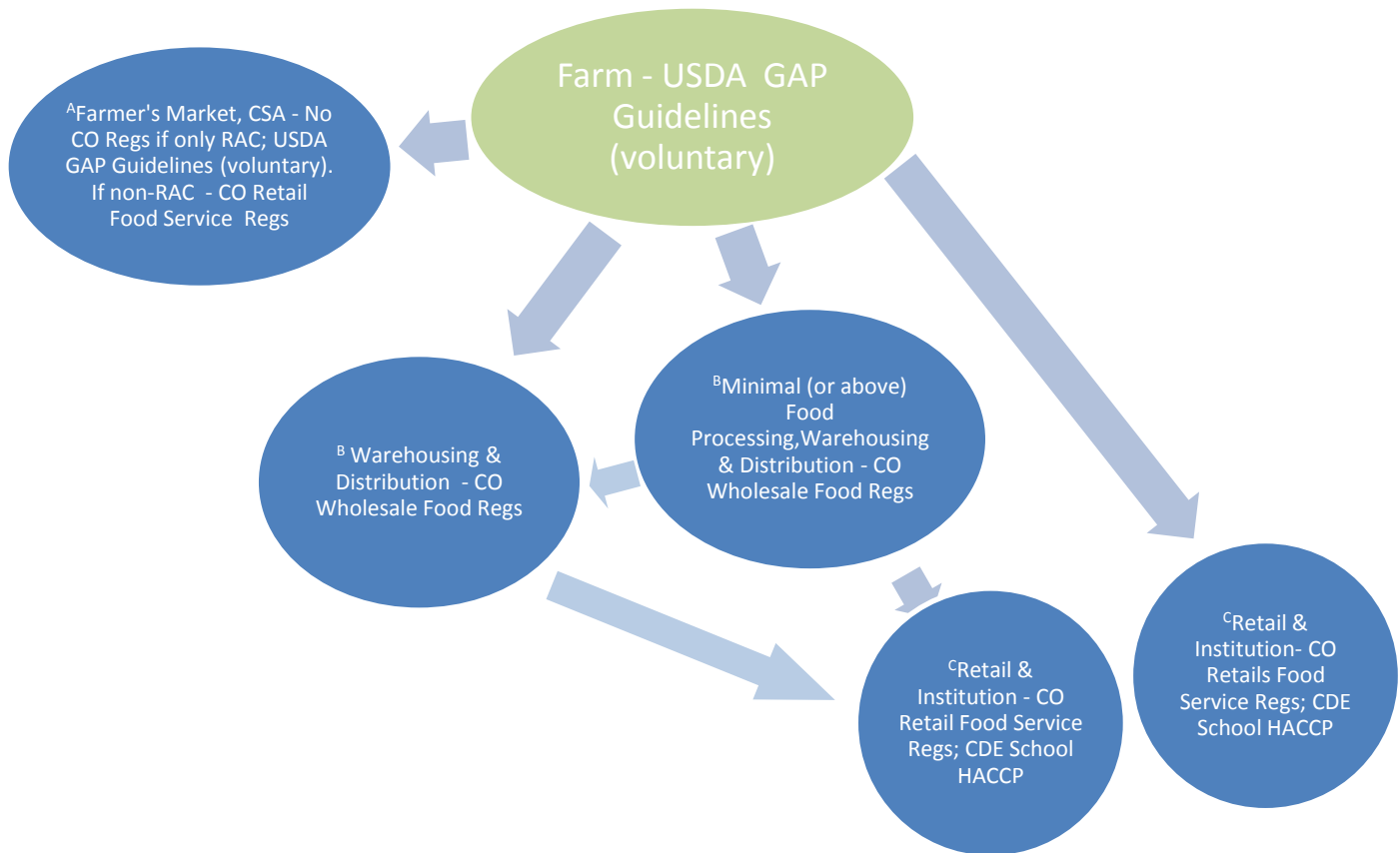


Figure 1 Farm to Retail Fresh Fruit and Vegetable Regulatory Chain of Authority

Other Food Regulations

Up to this point we've only reviewed the fresh fruit and vegetable regulatory chain of authority. However, many small to mid-sized producers also offer other food items in addition to fruits and vegetables that the food hub may want to aggregate and distribute. Eggs, meat, poultry and milk are among the more common and popular food items. Each one will be discussed briefly.

Eggs

A person or company that sells domesticated chicken eggs within Colorado must be licensed by [Colorado Department of Agriculture](http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1167928196642)⁹, per the Colorado Eggs Law (C.R.S. 35-21-104). The Colorado Department of Agriculture (CDA) is the regulatory agency, licensing egg producers and conducting on-farm inspections of egg producers for Good Manufacturing Practices (washing, sanitizing, candling, grading packing and storage). The Colorado Department of Agriculture also inspects egg dealers (wholesalers and retailers) to ensure they are meeting storage and distribution requirements.

Egg producers are categorized into two groups: small egg producers and large egg producers.

Small egg producers (selling less than 250 dozen per month) who sell to customers *on their farm* are exempt from the Colorado Egg Law, although they can voluntarily apply for an Egg Dealer license and request an on-farm inspection. This exemption also applies to the CSA model where eggs are pre-sold through shares and delivered to the consumer, provided they delivered in a cooler between 33° and 41°. Small egg producers selling off the farm (i.e. farmer's markets, grocery stores or restaurants) are required by CDPHE to have an Egg Producer license from CDA and to have on-farm

⁹ <http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1167928196642> (accessed October 4, 2011)

inspections to meet the Colorado Retail Food Establishment Regulation 'approved source' designation. They also must have a CDPHE Retail Food Service license and inspection from the local Health Department for farm-site storage and distribution.

Large egg producers (selling more than 250 dozen per month) at the wholesale or retail level are also required to have an Egg Producer license from CDA and to have on-farm inspections to meet the Colorado Retail Food Establishment Regulation 'approved source' designation.¹⁰

Additionally, the Colorado Department of Agriculture website states:

If eggs are sold anywhere off the farm, The Colorado Department of Public Health and Environment (CDPHE) requires they be from a licensed Egg Producer and inspected by CDA.⁹

From this statement it appears the small to mid-size producer working with the Food Hub will be required to voluntarily apply for an Egg Dealer license and request an on-farm inspection to show they meet the Colorado Retail Food Establishment Regulations 'approved source' requirement. The Food Hub would be required to obtain a Colorado Department of Agriculture Egg Dealer license for eggs that are stored and distributed.

Meat

[There are four types of meat processing in the United States](#)¹¹: Federal Inspection (USDA), State Inspection, Retail-Exempt and Custom-Exempt. Each one will be discussed briefly. Mobile meat or poultry processing facilities are not discussed.

Federal Inspection (USDA) - The United States Department of Agriculture's Food Safety and Inspection Service (USDA FSIS) is responsible for federally inspected meat processing plants. To qualify as a USDA meat processor, the facility is required to have a HACCP plan, Sanitation Standard Operating Procedures, daily inspection of processing facilities, and, if the plant slaughters livestock, ante mortem and post mortem inspection of every animal. Federally inspected products can be shipped over state lines (*interstate* commerce) and internationally to many countries. The Colorado Department of Agriculture maintains a list of [USDA Official plants](#)¹².

State Inspection - A state meat inspection program, where the facilities are required by law to have regulatory requirements and inspections that are 'at least equal to' federal inspection requirements. However, there are several limitations: 1) is that the meat is only available for intra-state commerce, and 2) that not all states offer a state meat or poultry inspection program. The USDA FSIS maintains a [listing of states that have these programs](#)¹³. Colorado does not have a state meat inspection program.

Retail-Exempt – a meat processor can sell retail products from his own storefront without a HACCP plan (in most cases). The processing plant is subject to periodic risk-based inspections from the United States Department of Agriculture's Food Safety and Inspection Service (USDA FSIS) and/or state regulatory authorities and the meat must come from USDA inspected livestock or State Meat Inspection Program, and. The retail-exempt meat processor can also sell limited quantities to wholesale venues, with limitations.

¹⁰ <http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1251572488864> (accessed October 4, 2011)

¹¹ <http://www.extension.org/pages/15944/meat-inspection> (accessed October 4, 2011)

¹² <http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251740716115&ssbinary=true> (accessed October 5, 2011)

¹³ http://www.fsis.usda.gov/regulations/Listing_of_Participating_States/index.asp (accessed October 5, 2011)

Custom-Exempt- A custom processor can process an owner's domestic livestock and/or wild game animal exclusively for the owner's consumption. As with the Retail-Exempt processor, the Custom-Exempt the processing plant is subject to periodic risk-based inspections from the United States Department of Agriculture's Food Safety and Inspection Service (USDA FSIS) and/or state regulatory authorities. Colorado adopted the [Custom Processing of Meat Animals Act](#)¹⁴ that governs custom processing plant construction and processing, mobile slaughtering units, and sanitary and licensing requirements. It does not include provisions for inspection of animals or selling of meat.

Poultry

Poultry must also be slaughtered and processed at a USDA inspected poultry processing facility for resale in most cases. Poultry slaughter and processing is regulated by the USDA FSIS Poultry Processing Inspection Act (PPIA) and there are multiple exemptions to the regulations. Determining which situations qualify for the exemptions is complicated and it is best to contact the appropriate agency for direction. On page 7 of the USDA FSIS [Guidance for Determining Whether a Poultry Slaughter or Processing Operation is Exempt from Inspection Requirements of the Poultry Products Inspection Act](#)¹⁵ is an exemption decision flow chart that can give you a visual picture of the exemption criteria.

However, poultry processing facilities are very limited. According to an online AgJournal article posted June 13, 2010 titled [USDA: More Processing Needed to Fill in Gaps](#)¹⁶ there are plenty of chickens and customers to buy them, but a lack of poultry processing facilities to meet federal inspection requirements. More research into this area is needed should the Food Hub want to aggregate and distribute chickens.

When working with small to mid-sized producers who offer additional products, such as meat or poultry, it is important to know that they are getting their livestock or poultry processed at a USDA inspected processing facility that allows the products to be sold (red meat and poultry cannot be processed in the same facility). For the producer who is selling meat or poultry under the CSA model, the Colorado Weld County Department of Public Health & Environment may require the producer obtain a Retail Food Establishment license through the local health department (in Weld County, the Weld County Department of Public Health & Environment) because of the storage and distribution of potentially hazardous food products. For a producer working with the Food Hub, proper processing of meat and poultry for resale will meet the Colorado Retail Food Establishment Regulations for 'approved source'.

Milk

It is illegal to sell raw milk in the State of Colorado. Colorado milk and milk products are regulated by the [Colorado Department of Public Health & Environment's Division of Environmental Health and Sustainability](#)¹⁷ through inspections at dairy farms, dairy plants and milk plants using the standardized Pasteurized Milk Ordinance that is used throughout the United States. Milk that is manufactured in Colorado must be transported, processed, tested and manufactured in the appropriate licensed facilities throughout the process.

¹⁴

<http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251599481976&ssbinary=true> (accessed October 10, 2011)

¹⁵ http://www.fsis.usda.gov/oppde/rdad/fsisnotices/poultry_slaughter_exemption_0406.pdf (accessed October 5, 2011)

¹⁶ <http://www.agjournalonline.com/news/x1055548277/USDA-More-processing-needed-to-fill-in-gaps> (accessed October 5, 2011)

¹⁷ http://www.cdphe.state.co.us/cp/dairy/dairy_faqs.html (accessed October 5, 2011)

Summary for the Northern Colorado Farm to School Food Hub and Weld Producer Food Hub:

A supplier safety assurance is one element to enabling local growers to move into the local markets. Multiple elements makes the local grower's entry into the larger consumer food chain more complicated, and for some, nearly impossible. Each requires time, expertise and personnel to implement that many don't have.

For the Food Hub

The Northern Colorado Farm to School Food Hub and Weld Producer Food Hub can bridge that gap by being the aggregation and distribution point into those markets. Any food hub that offers warehousing and distribution of fresh fruits and vegetables and other foods received for aggregation and distribution, will require a Colorado Wholesale Food license. These regulations also govern value-added products, such as sorting, grading, minimal processing, packaging, flash freezing, etc. of fresh or frozen products. If the Food Hub includes eggs, Colorado Department of Agriculture Egg Dealer license is also required. Table 3 summarizes Food Hub regulatory compliance requirements.

The regulatory authority in control at the point the food enters the consumer food stream will determine the supplier safety assurance that needs to be met. For a grower selling directly into the consumer food system, this can get complicated as there are differing regulations in effect depending on the point of entry. In addition, growers selling to schools will be required to meet the schools HACCP requirements for receiving produce and fruit, and meet the Supplier Control requirements.

As the 'middle man' between the food producers and the retail and institution outlets point of entry (defined as on or off premise human consumption, fee or no fee charged through restaurants, convenience stores, schools, markets, concession stands, etc.), it will be necessary for the Food Hub to assure the retail or institution they are receiving food products that meet the food establishment's regulatory requirements. Simply put, in most cases, the Food Hub will be required to show that the food meets the 'approved source' definition of the Colorado Retail Food Establishment Regulations.

For the Grower - Food Safety Plans That Meet USDA Good Agricultural Practices (GAP) and Other Regulations

On-farm producer food safety guidance will come from the federal USDA GAP guidelines since the Colorado Department of Public Health & Environment has no regulations or recommendations regarding fresh fruit and vegetable farm practices. Producers are concerned about food safety, as they recognize the financial and industry impact of food borne contaminations and are conscientious of best agricultural practices. However many small to mid-sized farms don't have the personnel, expertise or time to document their existing policies and procedures or develop food safety plans. Several states have begun to educate producers on how to meet GAP/GHP recommendations, especially with the keeping local foods local movement of the last few years.

Penn State Cooperative Extension has developed a simple GAP template for anyone with basic computer skills that is available online. The template includes checklists, logs, and suggested language for policies and procedures that can be adapted to create a complete food safety plan. The template and supporting documents are based on USDA GAP audit standards. Because this template is designed to meet Federal guidelines, the benefit is that Healthy Weld 2020 and Real Food Colorado can concentrate on education and technical assistance to growers in completing their food safety plan instead of creating policies and protocols from scratch. A brief summary of USDA GAP is included in Table 1.

As discussed above, if producers also offer other products, they will have to meet the respective food safety regulations governing that product. Table 2 summarized those food item discussed previously.

Food Hub Food Safety Regulations

Summary Tables as of October 2011

Table 1 –Producer - USDA Good Agricultural Practices (GAP) Summary

<p>GAP – Good Agricultural Practices – Practices that help produce growers prevent on-farm food borne illness contamination. GAP protects both the growers business economically from the consequences of food contamination, and the public from illness.</p> <p>The United States Department of Agriculture (USDA) and the Food and Drug Administration (FDA) issued a voluntary guideline document: The Guide to Minimizing Microbial Food Safety Hazards for Fresh Produce. Although these are voluntary, many produce buyers and distributors are requiring proof of GAP compliance, through third party inspections, as a condition of purchase.</p>	
Compliance: Voluntary	Responsible party: Grower
<p>Resources for completion: Penn State Cooperative Extension GAP Food Safety Plan Template¹⁸ – checklists, logs, policies and procedures to create a food safety plan. All based on USDA GAP audit standards.</p>	
Issues covered:	
Water source and quality: farm laborers, crop irrigation, food contact cleaning surfaces, fertilizer/pesticide/fungicide application	
Manure handling, storage	
Laborers: hygiene, health and sanitation practices	
Adjacent and previous land use	
Harvesting, field packing and transportation practices	
Food handler training	
Crop traceability	

Table 2 Producer - Regulatory Requirements/Recommendations by Food Type

Food Type	Regulatory Authority
Fresh Fruits and Vegetables	<ul style="list-style-type: none"> USDA Good Agricultural Practices guidelines (voluntary) Farm Safety Plan.
Eggs	<ul style="list-style-type: none"> Colorado Dept. of Agriculture Egg Producer license & on-farm inspection.
Meat	<ul style="list-style-type: none"> USDA inspected red meat processing plant with FDA approved labeling for individual sale. Colorado Department of Public Health & Environment Retail Food Service License (through local Health Department) for farm-site storage and distribution.
Poultry	<ul style="list-style-type: none"> USDA inspected poultry processing plant with FDA approved labeling for individual sale. Colorado Department of Public Health & Environment Retail Food Service License (through local Health Department) for farm-site storage and distribution.
Fluid Milk and Milk Products	<ul style="list-style-type: none"> Colorado Department of Public Health & Environment licensed processing facilities.

Table 3 Food Hub - Food Regulations for Working with Retail and Institution Outlets

Food Type	Regulatory Authority
Fresh or Processed Fruits and Vegetables	Colorado Wholesale Food Regulations license
Eggs	Colorado Department of Agriculture Egg Dealer license

¹⁸ <http://extension.psu.edu/food-safety/farm/how-do-i-write-a-food-safety-plan> (accessed October 12, 2011)