

**HEALTH BOARD  
Discussion Form  
(March 26, 2013)**

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**AGENDA ITEM (#) : Food Safety and Food Code Update**

**PRESENTERS:** Greg Stern, MD, Health Officer and Tom Kunesh, Supervisor, Food Safety Program

**BOARD ACTION:**    Action Item             FYI & Discussion

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**SIGNIFICANT POINTS OR EXECUTIVE SUMMARY**

The FDA Food Code and WA State Food Code are periodically reviewed and revised. The new state food code revisions go into effect May 1, 2013. We will bring proposed revisions to the Whatcom County Code in the coming month or two to update obsolete language in our code and to adopt the new WA State Food Safety Code by reference, but want to use this opportunity to present and discuss with you:

- The rationale and necessity for regulating retail food establishments
- The burden of foodborne illnesses and the risk from commercial food sources
- How food safety regulations are reviewed and revised periodically
- How the Whatcom County Health Department Food Safety program works with businesses to implement the retail food code and protect the public

In preparation for the presentation and discussion, we have included the references below.

The [DOH Food Code Revision webpage](#) provides insight into the breath and complexity of food safety regulation. As food industry practices and the causes of food borne illness evolve, food safety rules are amended to assure they are **effective** at preventing disease and are **fair and reasonable** for food establishments. The site includes the [Preliminary Significant Analysis](#) (cost-benefit analysis and rationale for changes) and [Small Business Economic Impact Statement](#), among other documents. The [Food Code Revision Core Workgroup Members](#) list of participants illustrates the involvement of business, consumers, academia, schools and childcare with government in the review and revision process.

[“Two Sides of the Coin for Food Safety of Cut Leafy Greens”](#) is a recent article in Food Safety News that provides a good, brief overview of the nutrition and safety issues around production and processing of fresh leafy green vegetables.

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**References:**

DOH Food Code Rule Revision web page

<http://www.doh.wa.gov/CommunityandEnvironment/Food/FoodWorkerandIndustry/FoodSafetyRules/FoodCodeRuleRevision.aspx>

“Two Sides of the Coin for Food Safety of Cut Leafy Greens”

<http://www.foodsafetynews.com/2013/02/two-sides-of-the-coin-for-food-safety-of-cut-leafy-greens/>

**BOARD ROLE / ACTION REQUESTED**

Discussion only, in preparation for pending WCC update

**ATTACHMENTS**

None



## Food Code Rule Revision

We have revised Chapter 246-215 WAC to keep up with national food safety standards, clarify parts of the code we have had to interpret, and to consider new food safety rules for places that serve young children such as childcare facilities and preschools. With some modifications, our current code is based on the 2001 FDA Food Code. This revision will adopt the 2009 FDA Food Code.

### Public Hearing

On October 10, 2012, the State Board of Health held a public hearing on the proposed rule changes for the Food Service Rule. The State Board of Health adopted the rules with minor changes from the proposed version of the rules. The effective date will be May 1, 2013.

[Proposed Rule Language \(PDF\)](#)

[Summary of Proposed Changes \(PDF\)](#)

[Small Business Economic Impact Statement \(PDF\)](#)

[Preliminary Significant Analysis \(PDF\)](#)

### Washington Food Code Working Document

Current Rule: [Washington State Retail Food Code Working Document \(PDF\)](#)

Revised Draft Incorporating 2009 FDA Food Code: [Washington State Retail Food Code Working Document, December 2011 DRAFT \(PDF\)](#)

## **Meetings - Food Code Revision Core Workgroup**

July 21, 2011 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

May 19, 2011 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

April 21, 2011 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

March 9, 2011 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

February 1, 2011 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

November 18, 2010 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

September 29, 2010 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

August 12, 2010 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

June 22, 2010 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

May 4, 2010 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

February 4, 2010 - [Agenda \(PDF\)](#), [Meeting Notes \(PDF\)](#)

[Food Code Revision Core Workgroup Members \(PDF\)](#)

# Food Safety News

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## Two Sides of the Coin for Food Safety of Cut Leafy Greens

By Cookson Beecher | February 27, 2013

It's a coin with two markedly different sides.

Flip it once and fresh cut leafy greens come up as the nutritional stars in salad mixes. On that list are spinach, kale, green and red leaf lettuces, baby leaf lettuces, escarole, endive, spring mix, arugula, romaine, and iceberg lettuce, among others. Praised by doctors and public health agencies alike for being nutritional powerhouses packed with vitamins, minerals and disease-fighting natural compounds made by the plants, fresh cut leafy greens come highly recommended as an important part of a healthy diet.

But flip the coin again and up come warnings from a recent report done for the Centers of Disease Control and Prevention that put cut leafy greens smack-dab at the top of the list of the 10 riskiest FDA-regulated foods.

According to that report, which reviewed foodborne illnesses between 1998 and 2008, salads and other food items containing cut leafy greens caused 22 percent — about one fifth — of the 120,321 foodborne illnesses in that 11-year period.

And while foodborne pathogens such as *E. coli*, *Listeria* and *Salmonella* can contaminate cut leafy greens, noroviruses were the main cause of illnesses linked to cut leafy greens, according to the report.

Noroviruses are often referred to as the "stomach flu" because they cause gastrointestinal symptoms (think vomiting and diarrhea).



Although noroviruses typically involve food contaminated by food handlers, several norovirus outbreaks from fresh produce have been linked to environmental contamination (in the field, for example).

But the study done for the CDC isn't the only flag warning of the potential dangers of fresh cut leafy greens. The FDA's 2009 Food Code is waving another one as well. In that version of the Food Code, which is the most recent one released, cut leafy greens are identified as a "potentially hazardous food." Also on the list are sprouts, cut tomatoes and cut melons.

But that doesn't mean the FDA is advising people not to eat them. The 2009 Food Code does, however, require potentially hazardous foods — cut leafy greens included — to be kept at 41 degrees from harvest to final point of sale or consumption.

Cold is safer

And why is that? Simply because temperature is one of the main ways that the growth of bacteria in or on food can be controlled, according to the FDA and other public health agencies.

Think of it this way: Many (although not all) types of pathogens and spoilage bacteria don't find it especially enticing to start reproducing when food is kept at 41 degrees F or lower. If you think of how "romantic" springtime weather is, it's easy to understand why pathogens would rather start new families (through cell division) in warmer temperatures than when the weather is chilly.

In an earlier article in Food Safety News about cut leafy greens, Jim Gorny, senior advisor for Produce Safety at FDA's Center for Food Safety and Applied Nutrition, was quoted as saying that pathogens can "run rampant" on cut salad greens and reach high levels of contamination in a short period of time — if the greens are not kept at cold enough temperatures.

Another reason that cut leafy greens can pose problems is that, like any living being, they have to eat. And when a leafy green is cut, nutrients start oozing out of that cut. The hungry critters head for the next meal, and hold on tight once they make it to the cut or torn site. It's dinner time, and they're not leaving. And while washing the cut leaves might dislodge some bacteria, it won't dislodge all of them because those cuts can open up the way for microbial invasions of the plant's tissues.

For the same reason, chemical sanitizers do only a marginal job of killing the pathogens.

Then, too, cut leafy greens grow near the soil's surface, where pathogens can be lying in wait. However, if farmers use good agricultural practices, the likelihood of pathogens' getting on the leaves is significantly lower than under growing conditions where these practices, which are aimed at preventing foodborne illnesses, aren't followed.

As for other warning flags surrounding cut leafy greens, a consumer only has to look to the marketplace to see some of them waving. In 2009, the FDA heeded those warnings after it analyzed 24 multistate outbreaks related to cut leafy greens from 1998 and 2008.

One of those was the infamous E. coli outbreak triggered by raw spinach, which according to the U.S. Centers for Disease Control and Prevention, caused 3 deaths and 199 illnesses, including 102 hospitalizations.

Since then, recalls and outbreaks related to cut leafy greens continue to grab headlines on an almost steady basis.

Back at the farm



On the farm front, growers who sell at farmers markets, farm stands, schools, restaurants, stores and through CSAs (subscription plans for fresh food from local farms) are becoming increasingly aware of the two sides of the coin. Those in the handful of states that have modeled their retail food codes after the FDA's 2009 Food Code are scrambling to figure out ways to comply with the new requirements for cut leafy greens. Sebastian Cianci, spokesman for the FDA, said that the agency is currently confirming which states have modeled their retail food codes after the FDA's 2009 Food Code. According to the latest information, Arkansas, Colorado, Delaware, New Hampshire, North Carolina, Oklahoma, Oregon and Washington state have done that. FDA's next food code is expected to be released later this year.

Although the new Food Safety Modernization Act generally exempts small-scale growers, that's not the case when it comes to the retail food codes adopted by the states.

Chuck Benbrook, a researcher and program manager for the Center for Sustaining Agriculture and Natural Resources at Washington State University, told Food Safety

News that it's "inevitable that any grower, regardless of scale, who wants to sell to schools, restaurants, or retailers" will have to meet certain food safety standards.

"There are big changes coming for a lot of small operators," he said. "Some will lose access to markets."

So what exactly are cut leafy greens?

According to the FDA, "cut leafy greens" are fresh leafy greens whose leaves have been cut, shredded, sliced, chopped, or torn. As such, "leafy greens" can include iceberg lettuce, romaine lettuce, leaf lettuce, butter lettuce, baby leaf lettuce (i.e., immature lettuce or leafy greens), escarole, endive, spring mix, spinach, cabbage, kale, arugula and chard.

The term "leafy greens" does not include herbs such as cilantro or parsley.

But that's only part of the story. There's also the distinction between a "raw agricultural product" and a "processed" food item.

If cut leafy greens fit the definition of a "raw agricultural product," they don't have to be kept at 41 degrees F or cooler.

Not surprisingly, that distinction has many small-scale growers in states that have modeled their retail food codes after the 2009 Food Code wondering what the difference is between cut leafy greens as a raw agricultural product and a processed food. They're also wondering how they're going to deal with this during the coming growing season.

Acknowledging the confusion over this, Joe Graham, a food-safety official with Washington state's Health Department, has sent out an explanation to health departments in counties throughout the state. According to health department officials in Arkansas, Delaware, Oklahoma, Colorado and Oregon, it pretty much lines up with the information they're providing or have provided to farmers.

Here's Graham's explanation:

Leafy greens that have only been cut from their root in the field (this is sometimes called a "harvest cut") with no additional cutting, shredding, slicing, chopping, or tearing are not cut leafy greens;

Leafy greens that simply have the stem, stalk, or the butt of the core trimmed are not cut leafy greens. This would apply to heads of lettuce and cabbages or whole clumps of leaf lettuce or spinach, for example. In all cases, the exterior leaves may be discarded.

If the core of a head of lettuce or cabbage is completely removed then the remaining leaves are cut leafy greens. But the entire plant harvested from the field would not be a cut leafy green.

If exterior leaves are removed and discarded, the head or clump is still not a cut leafy green. But if someone is snipping or tearing leaves off one by one to use as food (and the core of head lettuce or cabbage is still intact), the snipped or torn leaves are a cut leafy green. However, the remaining head or clump is not a cut leafy green.

Meanwhile, farmers in Washington state who sell cut leafy greens that are processed, in contrast to those that qualify as a raw agricultural product, must have the processing operation licensed by the state's Department of Agriculture. Farmers and other vendors who sell cut leafy greens directly to consumers at locations such as farmers markets and grocery stores should contact their local health department for requirements.

Go here for more information from the Oregon Health Authority. Oregon's new regulations pertaining to cut leafy greens went into place September 2012.

No matter the definition of cut leafy greens, most large suppliers keep their greens chilled from harvest to point of sale, which includes storage, display and transport. That's the case with the millions, if not billions, of bags of salad mixes and baby greens available in the supermarkets. However, most of those large farms are shipping the salad mixes and cut leafy greens to markets far from where they were grown.

A done deal

Back in 2010, when Food Safety News ran an article about this topic, some Washington state farmers said the regulators needed to come up with rules that made sense for small farms. Their main concern was that they couldn't afford to keep their cut leafy greens at 41 degrees F. And some said it didn't make sense for them to have to abide by regulations that were designed for the large farms, primarily in Salinas, CA that ship their salad greens to markets far from where they're grown.

But two years later, it's now a done deal for Washington state, Oregon and Colorado. And it's already been a done deal in the handful of other states that have modeled their retail food codes after FDA's 2009 Food Code.

In Colorado, where the new retail food code will go into effect March 1, Patricia Klocker, an official with the state's Department of Public Health and Environment, told Food Safety News that the state decided to update its retail food code because it wanted to meet national standards "and protect consumers."

Pointing to the many foodborne illness outbreaks linked to cut leafy greens, she also pointed out that the pathogens have changed, with some of them now more virulent than in years past.

"Documented science says that if potentially hazardous foods are not handled right, they'll support pathogens," she said, referring specifically to temperature requirements of 41 degrees F or cooler.

Alan Mazzotti, co-owner of Mazzotti Farms, manages six farmers markets in the Denver area. He told Food Safety News that from what he's heard, the growers in his markets are in compliance. He doesn't sell cut leafy greens, and they're not something that's commonly sold in his markets. He sticks to whole heads of leaf lettuce and Romaine.

Even so, he said that some farmers who sell at the markets he manages use coolers that can be plugged into their vehicles' cigarette lighters to keep foods such as eggs, cheese and cut leafy greens cool.

"It's standard operating procedure to keep them cool," he said. "The Health Department will be checking on this."

In western Washington, where the weather is generally cool in spring and early summer, salad mixes containing cut leafy greens are an important part of a small farm's revenue. In large part, that's because they're often the first thing growers have to offer their customers. Cut leafy greens can also be picked and sold throughout the season. And many times, farmers finish up the season with them.

Ben Craft, co-owner of Alm Hill Gardens in northwestern Washington, told Food Safety News that the requirement to keep cut leafy greens cold could turn out to be death knell for some small-scale farmers.

"They can't do it (keep cut leafy greens cold) unless someone comes up with an ingenious way to keep them cool in 90 degree weather," he said.

Pointing to his decades of experience in selling at farmers markets, he said cut leafy greens are a huge draw.

"The first thing farmers hear in the winter are questions from customers who want to know when the greens will be ready," he said. "It's almost like a person's system is yearning for them. And even though people can get them in the store, they come to the farmers markets because they know they'll be fresher there than at the stores.

Clayton Burrows, director of Growing Washington, an ag-related non-profit in Western Washington, told Food Safety News that he's still not entirely clear about how the growers can keep the cut leafy greens cool.

"This could be devastating to small-scale producers in this region," he said. "It's one of the few crops we can grow all season. Often, it's the first and the last crop of the season."

Estimating that cut leafy greens represent 20 to 25 percent of a small-scale farmer's revenue, Burrows said this new requirement to keep the greens cold could make or break a farm.

Even so, he said that growers will want to comply with the requirement. Part of that, he said, will be keeping a close watch on the greens to see when they're the right size for picking so they can qualify as a raw agricultural product. That right size is generally when the greens are at the "baby stage."

"I guess that's what we'll need to do," he said. "We want to comply if that will make our food safer."

What about you, the consumer?

No matter how diligent the growers who sell direct to consumers are about keeping their cut leafy greens safe to eat, you, the consumer, bear some responsibility for that as well. Here are some food safety tips for consumers:

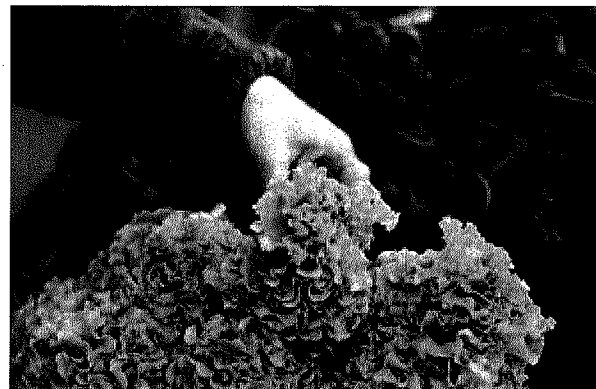
Slip some sort of ice pack into your market bag before heading out to a farmers market or farmstand. This will help keep the greens you buy cool until you get home.

Head home as soon as possible and put the cut leafy greens into the refrigerator as soon as you get there.

Before washing the cut leafy greens, make sure you wash your hands and the surfaces where you'll be working with them before you start preparing them for meals or sandwiches.

Be sure not to let them get cross-contaminated with raw meat, poultry or fish. Keep them separate from those types of foods.

Enjoy!



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