



Episode Two- Why food safety matters

Welcome to episode 2 of Food Safety Bites brought to you by the University of Wisconsin Madison, and funded by the USDA Food Safety Outreach Program, this is your host Harriet Behar. This episode is **why food safety matters**. In these podcast episodes, I will identify issues, and provide suggestions for how to reduce various fresh produce contamination risks and keep your customers safe. We will not talk in detail about what is required for a GAP audit or a FSMA inspection. If you want more information on those, please see the links on the website where you found these podcasts.

So why does food safety matter? Many types of fresh produce sold from your farm is eaten fresh, whether it travels far to the final consumer, or is purchased from your roadside stand. If the produce had pathogenic bacteria on it when it was put in the box, some bacteria could still be present and have grown given the right conditions, days later when someone else handles that produce in their kitchen, retail store, or restaurant. Even if produce would eventually be heated during cooking by a consumer and therefore have a “kill step” for bacteria ... it could still contaminate cutting surfaces when that raw produce is being prepared before cooking. Even if the farmer and/or their family does not get sick because they might be accustomed to these bacteria, there is still a good chance that bacteria that doesn't harm the farmer, can still make others sick.

There can be problematic bacteria or other pathogens on food contact surfaces, on people's hands, clothing, shoes, as well as being present in various bodily fluids and solids from spit, vomit, feces, and diarrhea. For those handling fresh produce, there needs to be a prevention of the fecal/oral chain- through frequent and EFFECTIVE hand washing and being aware that your clothing must be clean enough to be worn when handling food. Don't clean out the pig pen and then go right to cutting and boxing lettuce. Farms are part of the great outdoors, birds fly overhead, squirrels, rabbits, deer all may make nocturnal visits to your fields and leave little “presents” behind, letting you know that they were there (or in many cases we may not even see their droppings). Food safety practices are simply practical and proven ways to reduce risk of illness from eating fresh produce. We will never eliminate risks, as produce is touched by humans in the harvest and sale as well as having exposure when grown outside to animals and elements. There are some relatively simple things we can do to prevent contamination in the first place. A food safety outbreak that was traced back to a local farm would be bad for the farm, bad for our local food system, and of course also bad for the customers that were sickened. Good food safety also goes hand in hand with good business and efficiency by helping you streamline training and recordkeeping.

Let's talk about your customers: Three to four percent of the U.S. population have a known compromise or suppression to their immune systems. Add in people older than 65 years old who represent over 15% of the population and those under the age of 5 representing approximately 9% of the population, and we have a staggering number of those who would be most likely to get a serious illness or worse from contaminated food. More than 25% of the overall population is at risk for serious health issues when faced with bacterial contamination on



their food. As we have learned during the coronavirus pandemic, it is easy to spread disease from person to person, especially when it cannot be seen and people are unaware to take precautions to avoid that risk. A farmer cannot always know who is eating the produce they grow, since the original buyer may not be the person actually eating the food.

There are many different ways food can get contaminated. Chemical contamination from things such as pesticides or petroleum products and physical contamination from foreign objects of metal, wood or plastic. While my podcasts will not cover these items in great detail, they are important to watch for on your farm. Instead I will focus on biological contamination by living creatures- humans, rodents, pests and microorganisms including bacteria, viruses and other pathogens. Anyplace that saliva, fecal matter, or blood can come into contact with food, there can be a way for these bodily fluids to spread bacteria. Understanding where contamination can occur by those who work with fresh produce goes a long way in developing systems where this contamination can be prevented. A food safety plan should address how to avoid both human or animal fecal matter on the produce and prevent workers from contact with produce when sick or injured.

Wholesale distributors, retail stores and individual consumers of your produce want to know you have included food safety activities on your farm. In fact, many buyers will not purchase from you unless you have a food safety plan and/or have a third-party audit verifying that plan is in place. If your farm is large enough, you may need to be inspected to the standard in the Produce Safety Rule under the Food Modernization Act. Having a functioning food safety plan on your farm opens markets and lessens your liability, providing more economic opportunities.

Produce safety on the farm is important because it helps the farmer recognize problems, implement solutions where these problems are found, and continually modify activities and infrastructure to lessen risk. Farmers do not intentionally want to make others sick, but they cannot not let ignorance be an excuse for not educating themselves on the many hazards and how to prevent them.

So that's it for this episode of Food Safety Bites, the next episode is understanding microorganisms that affect food safety. This is your host Harriet Behar brought to you by the University of Wisconsin Madison, talk to you next time!