product at retail is really critical. The people who are handling the product need to have clean hands. Water used in re-crisping needs to be clean. Tools need to be clean, and so do racks."

"Make sure cases are clean," says PMA's Means. "Make sure employees who handle any produce have clean hands. If there's a salad bar, make sure the knives and cutting boards are sanitized. If you have limited space in a cooler, no meat should be above the produce," she explains, because the juices from the meat can drip onto it.

She warns that fresh-cut produce can have additional risks, because it "has more of a chance to have germs attached to it."

"The packaging around a processed fresh-cut product, with a few exceptions, is a major barrier to cross-contamination," says IFCPA's Gombas. However, he adds, "A substantial amount is cut in-store.

"In the store, the most important consideration for fresh-cut produce, except for contamination, is refrigeration," he continues. "Fresh-cut produce should be kept as close to 32° Fahrenheit as possible for maximum shelf life."

"It may not have to be refrigerated in its whole form," explains FMI's Hollingsworth, "but once it's washed and cut, it needs to be refrigerated."

Outside the produce department, store associates who pack bags need to know to keep produce separate from items, such as raw meat and seafood and chemicals, that can contaminate it, advises Hollingsworth.

EDUCATING YOUR CUSTOMERS

"It is the job of the government and the industry" to prevent food-borne illness, says Means, "but there is a role for consumers, too."

"We know consumers have a critical role to play in food safety," notes Hollingsworth. She and Means recommend taking full advantage of the FightBAC program from the Partnership for Food Safety Education (PFSE), Washington, D.C.

"For produce in particular, the FightBAC program put together a targeted program," says Hollingsworth.

FightBAC's Six Steps to Safer Fruits and Vegetables consist of Check (looking to see that the product is not damaged and that it is refrigerated if it is pre-cut), Clean (washing hands, tools and surfaces and rinsing produce if it is not pre-cleaned), Separate (keeping produce separate from raw meat and chemicals and avoiding cross-contamination from cutting boards), Cook (cooking any produce that has been contaminated by other foods), Chill (keeping cut or cooked produce cold) and Throw Away ("When in doubt, throw it out!").

Image courtesy of Partnership for Food Safety Education

FightBAC materials are available in English and Spanish.

The program's website is especially helpful because it allows retailers to customize and print out eye-catching food-safety brochures and fliers with their store's name and logo. Information is available in English and Spanish.

To get the word out, there are many options beyond handouts. "Everything from the high-tech store where they can have a running video to brochures, signs, posters and product labeling," says Hollingsworth. "Even through advertisements. A lot of times, in the Sunday flier, a retailer will put in a little box on food safety."

She also recommends having someone on staff answer customer safety questions by phone or e-mail. Another option is to direct customers to the FDA or USDA consumer hotlines.

"We need increased awareness about the FightBAC campaign," says Gorny, "because I think consumers are really thirsty for information about how they can protect their families, and this information is a really powerful tool for them." **pb**

SOMETHING IN THE AIR

In the past, food-safety programs emphasized the importance of clean water, equipment and surfaces. Now, the makers of the latest cutting-edge technology hope to prove to retailers that cleaner air means safer food, too.

"The FDA [Food and Drug Administration] and other entities are now talking about air quality as it relates to food safety," says Kris Morlan, director of marketing and communication for KES Science and Technology in Kennesaw, GA, makers of AiroCide PPT (perishable preservation technology). "We think it's the next thing in food safety."

"There's a growing awareness in that area," agrees Bob McDonald, president of Air-O-Care, an air-purification equipment manufacturer and installation company in Rockville, MD. "A vast majority of food-borne illnesses is transmitted through the air. Our systems are very effective at killing pathogens such as listeria, salmonella and E. coli. We've done tests to demonstrate that the DNA structure of molds and bacteria have been destroyed, not just disabled."

"Basically, any type of mold or bacteria in the air can reach the produce and grow on the surfaces and spread," according to Morlan. "AiroCide is a photolytic catalyzation technology developed by NASA that kills airborne mold and bacteria in coolers. It's not a filter — it actually kills any organic material that goes through it."

Both companies say their equipment is ideal for organic foods because they do not use chemicals. "Whole Foods [based in Austin, TX] uses our reactor in their floral and produce coolers in the retail stores," says Morlan.

Air-purification systems are also being used in fresh-cut processing facilities, supermarket processing rooms and display cases, as well as in shipping. "The food industry is becoming more and more globalized," says McDonald. Because of the long time it takes to ship from faraway locales, the risk of contamination and spoilage automatically increases. "You want produce to be delivered in as good condition as possible."

Rouse's Supermarket in Mandeville, LA, part of the 14-store chain headquartered in Thibodaux, LA, has been using AiroCide in its coolers for about six months. "I like it so far," says Chris Loar, the store's produce manager. "It definitely eliminates odor. I think the product seems to last longer."

Does it make produce safer? "It definitely doesn't hurt," he says. "Anything that's going to clean your air is going to help with food safety. It's another good tool to have." **pb**