Spring has arrived, and with it the hallowed ritual of the backyard barbecue. For an unlucky few there will be some serious aftereffects: the stomachaches, vomiting, or even hospitalization that can result from eating spoiled potato salad or an undercooked hamburger.

The CDC estimates that 325,000 hospitalizations and 5,000 deaths result from food-borne illness each year. The rate of illness tends to increase in the warmer months, in part due to picnics and barbecues, CDC researcher Elaine Scallan tells WebMD.

The good news this spring is a new study suggesting that Americans are wising up to the effects of eating risky foods. After conducting two national telephone surveys in 1998 and 2002 asking what people had eaten in the past week, researchers found that the percent eating one or more foods labeled "risky" in the past week declined from 31% in 1998 to 21% in 2002.

Researcher Erica Weis, MPH, of California's health services department, suggests that public health campaigns and media coverage of outbreaks may be responsible for the decline.

But there was room for improvement in certain groups. Among Asians and Pacific Islanders, the number eating risky foods was 32%. Research has found this group is more likely to eat raw fish or raw shellfish, Weis tells WebMD.

Risky-food consumption also appeared to be higher among children with compromised immune systems than among healthy children. The finding is worrying because an infection that could cause just a stomachache in a healthy person could hospitalize or even kill those with weakened immune systems.

The reason for this finding hasn't been studied. Perhaps sick kids want to eat the same things as their peers, Weis says. Or the finding may be due to the study design; parents answered surveys for their children, and the parents of sick children may keep closer tabs on what their children ate.

**Risky Foods to Watch Out For**

The researchers based their list of "risky" foods on studies of recent outbreaks. Here's the list:

- Pink hamburgers
- Pink ground beef
- Raw fresh fish
- Raw oysters
- Raw or unpasteurized milk
- Alfalfa sprouts
- Runny eggs
FOOD SAFETY TIPS FOR WARM WEATHER

Undercooked eggs were the most commonly eaten risky food. That includes eggs served sunny-side up as well as raw eggs used in preparation of hollandaise sauce, meringue, Caesar salad dressing, and the like.

Food safety authorities have long steered people away from sunny-side-up, soft-boiled, or "over-easy" eggs, all of which carry the risk of salmonella. If you must eat runny eggs or use them in recipes, Weis suggests you buy pasteurized eggs, which have been briefly heated to destroy bacteria. They are available -- typically at a small premium -- at many supermarkets. If you’re ordering sunny-side-up eggs at a restaurant, ask if they’re pasteurized, she suggests.

**Risky Take-Home Food**

Food safety experts are keeping an eye on some worrying trends in food consumption. One is the growing preference for unprocessed "natural" foods available at farmers' markets. While many of these foods may be very healthy, unpasteurized dairy products and juices are more likely to carry a variety of nasty bacteria, experts say. "You can have fresh and locally-produced food that is also safe," Scallan says, "and safe food means pasteurized milk and juices."

Another trend: Buying prepared food from supermarkets and then bringing it home for the family. It’s dangerous to leave perishable food at room temperature for more than two hours, notes Shelly Feist of the nonprofit Partnership for Food Safety Education. That window shortens considerably when temperatures are higher -- such as when a prepared meal is placed in a hot car. So be sure to eat prepared food soon after purchasing it, Feist says.

**Food Safety in the Outdoors**

The warm weather that makes springtime so inviting also creates an ideal breeding environment for bacteria and other pathogens found in food. Here's some advice from The Partnership for Food Safety Education on how to apply food-safety tips to the out-of-doors:

- **Clean.** Wash your hands -- as well as utensils, cutting boards, and countertops -- in hot soapy water before and after preparing each food item. Also wash produce, which can carry harmful bacteria. As easy as these directives can be to ignore while in the kitchen, it's even easier when you’re outside and playing with the dog, with the Frisbee, or with your baby niece, Feist notes. Don't drop your guard!

- **Separate.** Sure, it's tempting to pour that sauce you used to marinate raw burgers or chicken wings onto the cooked food. It's also tempting to place the cooked grub back onto the plate that held your raw meat. Don't give in! Always keep raw meat and its juices separate from cooked food. If you want to reuse that sauce, then boil it first.

- **Cook.** It’s the best way to kill bad bugs. When grilling, preheat the coals on your grill for 20 to 30 minutes, or until the coals are lightly coated with ash. Use a meat thermometer to ensure that hamburgers and red
meats are cooked to 160 degrees and ground poultry to 165 degrees. Poultry breast should be cooked to 170 degrees; dark meat (wings and thighs) should be cooked to 180 degrees. Poultry juices should run clear. Fish should be opaque and flaky.

- **Chill.** No, this doesn't refer to what you do after breaking open a Bud at the barbecue. Bacteria grow quickly at room temperature and even faster under the hot sun. So refrigerate meat while it marinates, and keep that potato salad in a cooler that's well-packed with ice or freezer packs.