



Dr. Mel Kramer is an environmental and infectious disease epidemiologist with over 25 years of professional experience as a consultant in all aspects of the food industry.

Prior to starting EHA Consulting Group, Inc. in 1980, he held positions in the New

Jersey State Department of Health (where he worked extensively with health care facilities), the Baltimore City Department of Health and was a local community Health Officer in New Jersey.

He has consulted widely with food retailers, processors, manufacturers, importers and exporters, health care facilities, as well as served as an expert witness in matters relating to food safety and regulations enforced by, among other agencies, the United States Department of Agriculture and the Food and Drug Administration.

He has lectured in the United States and internationally at colleges, universities and conferences and has recently been in Asia several times discussing the food safety and human health aspects of the BSE issue with trading partners of the United States—as well as meeting with European and UK food-safety scientists and reviewing their testing protocols and procedures. Dr. Kramer is also a frequent speaker before food industry groups and governmental panels.

Dr. Kramer holds a Ph.D. in Environmental Health and a Master's degree in Public Health with concentrations in Environmental Health and Epidemiology.

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Excellence in Food Safety in a Sea of Pathogens:

The issues surrounding food safety and infection control, have had heightened visibility among consumers as a result of both extensive research in healthcare facilities and well-publicized incidents of foodborne illness. Large-scale, long-lasting, and protracted outbreaks of gastrointestinal diseases, such as Salmonellosis have been attributed to common consumer products such as peanut butter, tomatoes and peppers.

E. coli O157:H7 has been identified in not only to undercooked ground beef, but also on fresh produce such as lettuce, spinach and sprouts—just to name a few.

Listeria monocytogenes is seldom thought of by many as a foodborne pathogen of concern since gastrointestinal *Listeria monocytogenes* is rarely ever diagnosed, but this is because we do not routinely test for it. Invasive Listeriosis, however, has devastating effects on the chronically ill such as immuno-compromised transplant recipients. It can also cause fetal death in pregnant women and significant mortality in persons over the age of 65.

Norovirus, once thought of as more of a nuisance than a threat, is also emerging as a potentially life-threatening viral disease through its ability to cause pulmonary edema. Although the American public seems to think that Norovirus is only a “cruise ship” disease, this is far from the truth. In the United States surveillance activities for Norovirus have primarily focused on cruise ships, and, as the old public health adage says, “when you look for something, you will find it”. In the United Kingdom, hospitals and nursing homes are the facilities primarily targeted for Norovirus surveillance and it is in these types of facilities are where it is primarily identified. The danger of Norovirus is that it is not only caused by fecal-oral transmission, but can be aerosolized and inhaled. Infection can also occur from touching inanimate objects.

Away from the public debate but still in the minds of consumers is the entire issue of patient safety-- and on infection control as one of the major pillars of patient safety. Not only is patient safety a moral and ethical issue,

The Challenge for Health Care Food and Nutrition Departments

breakdowns in safety have major negative financial effect on the bottom line of our entire health-care system affecting providers, insurers, and ultimately, our federal budget.

The issue of infection control is a bilateral one for Food and Nutrition Departments. Not only are they responsible for preventing foodborne pathogens from going from the kitchen to the patient, it must also prevent items from the patient, such as soiled and trays and other objects, from contaminating the department. Workers must be well-trained on the prevention of cross-contamination—even if their sole job is to deliver and pick up trays on a unit.

Health-care facilities, after spending outrageous sums of money on infectious disease strategies, have deduced what most parents tell their children: wash your hands well and wash your hands often. This, taken to the next level with the application of alcohol-based hand sanitizers, has proven to be one of the most effective measures in the prevention of nosocomial infections including bloodline infections, respiratory infections, urinary tract infections and foodborne /ice-borne gastrointestinal infections.

The logical question has to be: “What can be done to reduce the probability of foodborne disease being transmitted through the Food and Nutrition Departments of health-care facilities?” Although the academic answers are fairly simplistic, putting them into practice and monitoring and validating them are both an art and a science that must be driven from the top-down or they are destined to fail.

Directors of Food and Nutrition Departments not only have to quarterback the education and re-education of their employees, they must be vigilant in checking the websites of the FDA <http://www.fda.gov/opacom/7alerts.html> and the USDA

http://www.fsis.usda.gov/Fsis_Recalls/index.asp for recalls of products that may impact their facilities. It is highly recommended that the director partners with whoever at the hospital tracks recalls of medical devices and pharmaceuticals. Because they receive regular e-mail alerts automatically about these recalls, these partners may provide a way for the foodservice director to be able to delegate this responsibility to a highly responsible individual, most often in Risk Management or Quality Assurance.

Third-party inspections by qualified inspectors are a must. Those completing these inspections should be either state licensed as sanitary inspectors, registered environmental health specialists, registered sanitarians, or carry the NEHA certification. These inspections should ideally be conducted on a monthly basis and should include laboratory analysis of food samples for total aerobic plate count, total coliforms and generic E. coli. Specific pathogen testing and environmental testing in the Food and Nutrition Department has not proven to be effective—except in unusual circumstances.

Another issue of food safety that should engender deep thought is that of a menu composition, either house-wide or medical service based. The pathogen of most concern is *Listeria monocytogenes* and its prevalence in particular foods. The USDA and HHS, alone and in partnership with medical organizations such as the American College of Obstetricians and Gynecologists, have recommended pregnant women avoid certain foods including soft cheeses, smoked fish and uncooked luncheon meat. This recommendation also holds true for transplant recipients and other immune-compromised individuals and elderly, chronically ill patients. A recent *Listeria* outbreak in Canada, where luncheon meat was served to patients in hospitals and nursing homes, resulted in significant morbidity and mortality. Of course, our hospitals and other health-care facilities are not prisons; well-intended family members may actually bring in these food products to their loved ones unbeknownst to anyone in the hospital, totally negating the efforts to remove these products from the menu.

There is no question that transmissibility of foodborne diseases in health-care facilities can be minimized, and the probability for an outbreak significantly reduced, if food safety is made a priority through appropriate training, reinforcement, and implementation of best practices and procedures. Risk prioritization should occur on many levels and should include facility review by third-party inspectors auditing equipment for proper temperature control, implementation of appropriate training for, and reinforcement of, good practices and procedures, and constant vigilance for breakdown of any facet of a comprehensive food safety program. It is highly recommended that these issues be discussed with your hospital epidemiologist and infection control practitioner who are most able to internally assist you. Through their internal surveillance, they should be aware of the early warning issues concerning foodborne pathogens.

Food and Nutrition managers and directors have an awesome responsibility. The issue of food safety, and the broader issue of patient safety in terms of infection control, is an area where the Food and Nutrition Department plays a major role in the health, well-being and safety of patients, staff and visitors to your institution.