

# The Role of the CDM in Food Safety for Seniors



## *Association of Nutrition & Foodservice Professionals Position Paper*

### INTRODUCTION

The Centers for Disease Control and Prevention (CDC) estimates that each year roughly 1 in 6 Americans (or 48 million people) gets sick from foodborne illness. Of these, approximately 128,000 are hospitalized, and 3,000 die of foodborne diseases.<sup>1</sup> These estimates, most recently updated by the CDC in 2011, provide the most accurate picture we have of which foodborne pathogens cause the most illnesses in the United States, and who is at greatest risk for contracting a foodborne illness.

Foodborne illness is a serious public health threat to Americans of all ages, but senior citizens are often most at risk. The CDC Foodborne Disease Active Surveillance Network states that the deaths “from foodborne illness among nursing home residents are 10 to 100 times greater than for the general population.”<sup>2</sup> To address this concern, the Food and Drug Administration provides special guidelines in the FDA Model Food Code for establishments that serve “highly susceptible populations.”<sup>3</sup>

The FDA defines “highly susceptible populations” as persons who are more likely than others in the general population to experience foodborne disease because they are:

- (1) Immunocompromised; preschool age children, or older adults; and

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(2) Obtaining food at a facility that provides services such as custodial care, health care, or assisted living, such as a child or adult day care center, kidney dialysis center, hospital or nursing home, or nutritional or socialization services such as a senior center.

This includes many of the populations served by Certified Dietary Managers (CDMs). In fact, older persons (above age 65) who are at higher risk of becoming ill from certain foodborne pathogens are the largest population group served by CDMs. In a recent survey completed by the Association of Nutrition & Foodservice Professionals (ANFP), approximately 42 percent of CDMs indicated they were working in a “Long-Term Care/Nursing Home.” About 24 percent indicated they were working in a “Hospital.” Another 8 percent worked in a “Continuous Care Retirement Community.”<sup>4</sup> This accounts for nearly three-fourths of the ANFP membership.

The federal government, most specifically the Department of Health & Human Services (HHS), oversees and regulates nursing homes. Currently HHS does not require minimal levels of training or certification in food safety and sanitation for the people who run foodservice operations in these facilities, and who are feeding seniors on a daily basis. *It is the position of ANFP that the Certified Dietary Manager is best qualified to protect the food safety of seniors in these facilities, and a CDM needs to be in charge of the foodservice operation in any skilled nursing facility that does not employ a full-time qualified dietitian as the foodservice director.*



**As the senior population grows,** those who reside in residential care facilities will increase, and thus there will be greater numbers of seniors at risk for foodborne illness. The person who manages the foodservice within these communities plays a vital role in protecting the clients in their care from foodborne illness.

## AN AGING POPULATION

According to the most recent government Census (2011), 35 million people were over age 65 in the United States. By 2030, projections show that 20 percent of the population is likely to be over age 65 (about 70 million people), and by 2050 the group over 65 will number 86.7 million and comprise 21 percent of the population.<sup>5</sup>

In addition, the CDC trend report of 2010 indicates that over 1.7 million people reside in nursing homes in the United States.<sup>6</sup> The National Center for Health Statistics reported that nearly a million seniors live in residential care facilities (assisted living and personal care homes) in 2010.<sup>7</sup> These numbers are expected to double by 2030. As the senior population grows, those who reside in these types of facilities will also increase, and thus there will be greater numbers of seniors at risk for foodborne illness. In a study released in 2011 by the University of California, San Francisco, nearly 40 percent of nursing homes had deficiencies in Food Safety and Sanitation (F 371) in 2009.<sup>8</sup> Therefore, foodborne illness in this population and these settings is a very important issue to address. The person who manages the foodservice within these communities plays a vital role in protecting clients in their care from foodborne illness.

## HOW AGING AFFECTS RISK OF FOODBORNE ILLNESS

Our immune systems experience gradual changes as we grow older. Those changes include a slower immune response and decreased immunity against pathogens. Our gastrointestinal tract becomes more easily inflamed as we age. As a result, we become more susceptible to a variety of foodborne illnesses, particularly such pathogens as Salmonella and norovirus. In addition, other factors associated with aging may increase risk of foodborne illness. The elderly often have chronic disease, a slower digestive process, reduced sense of taste and smell, decreased effectiveness of antibiotics, and are more likely to suffer from malnutrition.

The elderly are more likely to contract and die from infectious disease than other groups. And often it isn't the disease itself that causes death, but the symptoms or other effects of the illness. Symptoms of diarrhea and vomiting can create conditions of dehydration which can seriously affect the ability of an elderly person to recover from the illness. According to the CDC, people over 74 years of age are five times more likely to die from infectious diarrheal disease than in the next highest group (children under four years of age). They are also 15 times more likely to die than younger adults.<sup>9</sup>

Seniors as a whole tend to be more susceptible to death and chronic long-term health effects from foodborne-induced gastroenteritis, because their immune systems are often impaired and their gastrointestinal tracts produce less stomach acid as they age, according to a study by J. L. Smith<sup>10</sup>. They have more underlying medical conditions and their immune systems respond much more slowly or are less effective in defending against the invading pathogen. Jamie Stamey, writing in the June 2006 issue<sup>11</sup> of Nursing Homes magazine, cites other reasons why “residents of long-term care facilities tend to be more vulnerable to foodborne illnesses than the general population,” including the facts that many seniors are on antibiotics that kill beneficial bacteria, and that long-term care facilities are confined environments where pathogens can spread easily. The fact that CDC and others continue to cite this data suggests that not much has changed from the information generated in the original study on this subject—The Journal of the American Medical Association’s report titled “Foodborne Disease Outbreaks in Nursing Homes, 1975 to 1987”<sup>12</sup>, which reported that nursing home residents accounted for 2.4 percent of the foodborne illnesses in the United States during that period, but 19.4 percent of the deaths.

## PATHOGENS OF SPECIAL IMPORTANCE

We also know that older persons are more prone to certain pathogens. According to the CDC, in most outbreaks of Salmonella, E. coli and other illnesses, a disproportionate number of reported victims (between 15-20 percent) are very young or very old. In addition, Salmonella and norovirus are the most common pathogens associated with foodborne illness, and also those most likely to cause hospitalization, especially among the elderly.<sup>13</sup>

## COSTS OF FOODBORNE ILLNESS

A new study published in the Journal for Food Protection put the cost of foodborne illness at somewhere around \$77.7 billion.<sup>14</sup> This study estimates costs for medical expenses, productivity losses, and illness-related death at an annual cost of \$51 billion. The study added a measurement for pain, suffering, and functional disability that brings the estimated total annual cost to \$77.7 billion. However, high as those numbers are, they don't include economic facts such as costs to the food industry, including reduced consumer confidence, recall losses, or litigation, nor does it include the cost to public health agencies that respond to illnesses and outbreaks. And how do you measure the cost of a life—or the quality of that life?

The rising cost of healthcare, particularly as our population ages, is of increasing concern. Many of the aging conditions that contribute to that cost cannot be changed, only a way found to manage the cost. More and more pressure is being put on the healthcare system to manage costs and to seek ways to prevent disease to begin with. The good news is that most foodborne illness is preventable. If the risk to seniors can be minimized and the likelihood of an outbreak reduced, not only will quality of life for seniors be improved and lives preserved, but the cost of care resulting from a foodborne illness can be reduced or never be incurred. These preventative measures can go a long way in reducing healthcare costs in general.

## CONTRIBUTING FACTORS TO FOODBORNE ILLNESS IN THE ELDERLY

Studies suggest that a major contributing factor to foodborne illnesses among the elderly is that nursing home kitchens are inspected infrequently. The Centers for Medicare & Medicaid Services contracts with each state to conduct onsite inspections; including those on food storage and preparation, and that these

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inspections occur “on average about once a year.”<sup>15</sup> Nursing home inspections are very different from traditional restaurant inspections because they examine a variety of issues that impact general resident care other than food safety and sanitation. Some states do not even have institutional foodservice inspectors trained in food safety standards specified by the FDA. It has also been suggested that only a small fraction of foodborne illnesses in nursing homes are actually reported as such, with a considerable number of cases attributed to other causes.

The HHS regulations at 42 CFR 483.35 say that nursing home staffing must include a full-time, part-time, or consulting dietitian. Even if the facility employs a full-time dietitian, that professional may not be focused on the foodservice operation. The dietitian is ultimately responsible for the nutritional well-being of the resident, and depending on the fragility of the residents his/her primary responsibilities may be clinical. Also, many facilities are small and do not employ a dietitian full time. The dietitian may be a consultant and only in the healthcare facility for a limited time each month. In addition, food safety and sanitation may be a small part of the education that a dietitian receives, and there is no requirement that a dietitian keep current with continuing education in food safety and sanitation.

So, who is responsible for food safety and sanitation as well as food services when that part-time or consulting dietitian is not present? Only half of all nursing homes and long-term care facilities across the country have a single full-time kitchen

“ ” ...facilities that had a CDM in place had a lower rate of dietary/nutrition deficiencies than facilities with non-certified managers. Across the board, facilities with CDMs fared better than those without a CDM in almost every type of dietary/nutrition deficiency.

staff member certified in safe food handling, preparation, and sanitation. Currently only 18 states require certification from the Certifying Board for Dietary Managers as a requirement for supervising the foodservice department in a skilled nursing facility. Only 11 states have such a requirement for hospitals.<sup>16</sup> As more seniors enter these facilities in the future, the likelihood that foodborne illness can affect them will only increase.

#### ROLE OF THE CERTIFIED DIETARY MANAGER

CDMs who complete a dietary manager program that is approved by the Certifying Board for Dietary Managers had a significant component of food safety and sanitation education included in their curriculum. The nationally-recognized credentialing exam offered by the Certifying Board for Dietary Managers ensures that each individual who passes that exam has had the training and experience to competently perform the responsibilities of a dietary manager, including overseeing the food safety and sanitation in a foodservice operation. CDMs work together with registered dietitians to provide quality nutritional care for clients, and among others, perform a number of tasks that impact food safety. These safety and sanitation tasks, identified in the CDM, CFPP Scope of Practice<sup>17</sup> include the following:

- Specify standards and procedures for food preparation
- Manage a sanitary foodservice environment

## To view the reference list

or a PDF of this Position Paper, visit [www.ANFPonline.org](http://www.ANFPonline.org). Click the Resources & News tab on the left, then click Position Papers.

- Protect food in all phases of preparation, holding, service, cooling, and transportation
- Purchase, receive, and store food following established sanitation and quality standards
- Purchase, store, and ensure safe use of chemicals and cleaning agents
- Manage equipment use and maintenance

In addition, the CDM, CFPP Scope of Practice identifies areas in which the CDM interacts with employees who are directly involved in food preparation. The management and training of those employees has direct impact on the food safety in the facility:

- Develop work schedules, prepare work assignments
- Prepare, plan, and conduct departmental meetings and in-service programs
- Interview, hire, and train employees
- Conduct employee performance evaluations
- Supervise, discipline, and terminate employees
- Develop and implement policies and procedures

Each CDM, CFPP is also required to complete at least five hours of food safety continuing education during each certification period (3 years) in order to maintain their credentials. This ensures that the CDM, CFPP keeps abreast of changes in Food Code regulations and stays knowledgeable about the latest food safety information.

### **CERTIFIED DIETARY MANAGERS ARE BEST SUITED TO PROTECT FOOD SAFETY FOR SENIORS IN CARE FACILITIES**

In an analysis of publicly available CMS data, facilities that had a CDM in place had a lower rate of dietary/nutrition deficiencies than facilities with non-certified managers. Across the board, facilities with CDMs fared better than those without a CDM in almost every type of dietary/nutrition deficiency.<sup>18</sup> This is a clear indication that having a Certified Dietary Manager in place makes a difference in the health and well-being of the residents in the facility.

It is important to make certain that foodservice managers who run the day-to-day operations are adequately trained and certified in safe food handling. ANFP members with a CDM credential have extensive training in food safety and sanitation, as well as in other areas that affect the care of seniors. Because

of the seriousness of foodborne illnesses, the significant health and fatality risks to the elderly, and the inconsistent and often ineffectual state inspection process, ANFP takes the position that Congress needs to act to further protect the millions of seniors in nursing homes and long-term care facilities from foodborne illnesses. ANFP believes that requiring the director of foodservices in a facility that receives federal funds be a CDM, CFPP if a full-time dietitian does not fill that role will reduce the incidents of foodborne illness, reduce the impact of such illnesses on the quality of life of seniors in care facilities, and result in lower healthcare costs. The Certified Dietary Manager, Certified Food Protection Professional (CDM, CFPP) is the best qualified person to do that. ☺

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