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An Assessment of Atlanta Area Emergency Operations Plans

for Emergency Relief Services Utilized by Senior Citizens

Carline P. Richardson

B.S., University of Georgia

A Thesis Submitted to the Graduate Faculty
of Georgia State University in Partial Fulfillment
of the
Requirements for the Degree

MASTER OF PUBLIC HEALTH

ATLANTA, GEORGIA

30303

An Assessment of Atlanta Area Emergency Operations Plans

for Emergency Relief Services Utilized by Senior Citizens

by

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ABSTRACT

An Assessment of Atlanta Area Emergency Operations Plans for Emergency Relief Services Utilized by Senior Citizens

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The emergency response readiness of the public health and emergency management systems have become increasingly important topics for research, development and action in the United States. Senior citizens represent a large and growing population group in the United States. Older persons are likely to be disproportionately vulnerable during disasters because they are more likely to have chronic illnesses, functional limitations, and sensory, physical and cognitive disabilities than those of younger ages. Elderly health and safety have become the responsibility of the elderly themselves, of the community in which they live, and the various agencies and organizations charged with preparedness planning.

The goal of this study was to assess the emergency operations plans (EOPs) of emergency relief agencies and organizations in the Atlanta area for the provision of emergency relief services utilized by senior citizens as a special needs population. The research and analysis performed was completed in two steps: a review of collected disaster and emergency operations plans (EOPs) and standard operating procedures (SOPs), and a qualitative analysis of a survey submitted to the agencies.

Although many EOPs and SOPs referred to emergency relief services for special needs populations, the plans were not functional and did not fully outline the 'who, what, when, where and how" to provide disaster relief services. Public health agencies must endeavor to better address the disaster related needs of elderly persons who have physical disabilities, special medical needs and communication disabilities. Disaster preparedness plans must ensure the availability of all items necessary to control and prevent complications related to chronic diseases, prevent acute events and promote functionality and independence.

INDEX WORDS: senior citizens, elderly, emergency relief services, assessment, emergency operations plans, standard operating procedures, chronic disease, disability, Atlanta

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CHAPTER I

INTRODUCTION

Senior citizens represent a large and growing population group in the United States. The issues of their health and safety, once considered the domain of the family or of the specialized institution caring for the elderly, has become the responsibility of the elderly themselves, of the community in which they live, and the various agencies and organizations charged with preparedness planning for their community (Eldar, 1992). Health and functional status are key factors in the ability of persons of any age to respond to natural disasters and other emergency situations. In disaster preparedness and response, the terms vulnerable or special needs are often used to characterize population groups whose needs are not fully addressed by traditional service providers. Vulnerable populations cannot comfortably or safely access and/or utilize the standard resources offered in emergency preparedness, relief and recovery (AOA, 1995; CDC, 2006; Fernandez, 2002; Gibson & Hayunga, 2006; Lunsford, 2000). Older persons are likely to be disproportionately vulnerable during disasters because they are more predisposed to chronic illnesses, functional limitations, and disabilities (sensory, physical and cognitive) than younger age groups. In addition, they often take multiple medications and rely on formal or informal caregivers for assistance (AOA, 1995; CDC, 2006; Fernandez, 2002; Gibson & Hayunga, 2006; Lunsford, 2000).

As a society we must begin to respond to the challenges created by age longevity, and realize that the problems encountered in our public services and systems are going to worsen as the population ages (Berger, 2006). While there is a large volume of literature on disasters, very little of it focuses on older persons and their unique disaster relief needs. Publications on disasters and emergencies provide little information about addressing the relief needs of large numbers of people with chronic illnesses and disability. Furthermore, these texts primarily reflect experiences of dealing with natural disasters internationally, primarily in developing countries (Ford & Mokdad, 2006).

Public health should advocate and work for the empowerment of disenfranchised community members, aiming to ensure the basic resources and conditions necessary for health are accessible to all (IOM, 1988; PHLS, 2002). According to the Older Americans Act, our Nation's senior citizens are entitled to the best possible physical and mental health which science can make available without regard to economic status (OAA, 1965). It is the responsibility of public health agencies, and the community at large, to link people to needed personal health services and assure the provision of health care when otherwise unavailable (APHA, 2007).

Disaster response and relief efforts involve an array of local, state and federal agencies with services augmented by non-governmental organizations and local charities and groups. All of these organizations provide a limited scope of relief and recovery services for their target population group. However, a poorly designed, unevaluated or inadequately evaluated plan may do more harm than good if it leads to a false sense of security and ineffective performance during an actual emergency (Gebbie & Valas,

2006). Senior citizens are a subset of our population who require special services and equipment due to disease and disability (AOA, 1995; CDC, 2006; Lunsford, 2000).

The goal of this study was to assess the emergency operations plans (EOPs) of emergency relief agencies and organizations for the provision of emergency relief services utilized by senior citizens as a special needs population in the Atlanta Metropolitan Area. Chapter II reflects the findings of a literature review defining local, state, and federal responsibilities during disasters and other emergency situations, the senior citizen population and their common health problems and emergency relief needs. Chapter III describes the methods and procedures and research design. Chapter IV presents the findings of the study and discussion of the results. Chapter V contains the recommendations and conclusions.

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CHAPTER II

REVIEW OF THE LITERATURE

Disaster Response and Relief

Disasters are defined as a serious disruption of a community which causes threats or losses that exceed the ability of the affected community to cope without the support of outside resources (Penner & Wachsmuth, 2008). Emergency management agencies generally group disasters into the following categories (Gibson & Hayunga, 2006; Noji, 1997):

- Natural: hurricanes, tornadoes, earthquakes, wildfires, floods, droughts, snow/ice storms, volcanic eruptions.
- Man-made: large fires, transportation accidents, hazardous materials, terrorist attacks, weapons of mass destructions, civil unrest
- Technological: Utilities, information technology failures
- Public Health emergencies: Infectious diseases, such as epidemics, heat emergencies, etc.

Disaster response and relief efforts fall within the jurisdiction of local, state and federal agencies with services augmented by non-governmental organizations (NGOs) and local charities and groups (DHS, 2008; Hooke & Rogers, 2005; Waugh, 2000). State and local governments are closest to those impacted by incidents, and have always had the lead in response and recovery. Local police, fire, emergency medical services, public

health and medical providers, emergency management, public works and environmental response professionals are often the first to detect a threat or hazard, or respond to an incident. If the extent of the event is determined to be greater than their own ability to respond, they organize and integrate their capabilities and resources with neighboring jurisdictions, the State, NGOs, and the private sector (DHS, 2008; Haddow & Bullock, 2006).

During response, States have significant resources of their own, including State emergency management and homeland security agencies, State police, health agencies, transportation agencies, incident management teams, specialized teams and the National Guard. States play a key role coordinating resources and capabilities throughout the State and obtaining resources and capabilities from other States. If the state decides that the size of a disaster event exceeds the state's capacity to respond, the governor will make a formal request to the president for a presidential disaster declaration. If the president grants the disaster declaration, FEMA activates the National Response Framework in support of state and local efforts to respond and recover from the disaster event (DHS, 2008; FEMA, 2007; Haddow & Bullock, 2006).

NGOs perform a vital role at the local, State, and national levels by providing essential service missions in times of need. NGOs provide sheltering, emergency food supplies, counseling services, and other vital support services to support response and promote the recovery of disaster victims. These groups often provide specialized services that help individuals with special needs, including those with disabilities (DHS, 2008; Haddow & Bullock, 2006; Townsend, 2006).

Response activities following an emergency or disaster are designed to provide emergency assistance for victims (e.g., emergency shelter, medical care, and mass feedings) and to return life to normal or improved levels (Haddow & Bullock, 2006; NCD, 2005). The Federal government identifies services essential to meeting immediate threats to life and property in the Robert T. Stafford Disaster Relief and Emergency Assistance Act (FEMA, 2007). The Federal government mandates that these services are to be provided to all citizens without discrimination on the grounds of race, color, religion, nationality, sex, age, disability, English proficiency, or economic status (FEMA, 2007). These services include, but are not limited to:

- The provision of equipment, supplies, facilities, personnel and other resources necessary required by governments to provide assistance to the public;
- The provision of medicine, durable medical equipment, food and other consumables;
- Search and rescue, emergency medical care, emergency mass care, emergency shelter and other essential needs, including movement of supplies or persons; and
- Dissemination of public information and assistance regarding health and safety measures.

The National Response Framework (NRF) is a guide provided by the Department of Homeland Security which defines the key principles, roles, and structures that organize how the United States conducts all- hazards response. The NRF describes how communities, tribes, States, the Federal Government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national

response. It also describes specific authorities and best practices for managing incidents that range from the serious but purely local, to large-scale terrorist attacks or catastrophic natural disasters. The term "response" as used in the NRF includes immediate actions to save lives, protect property and the environment, and meet basic human needs. The *NRF* was written for those who have a responsibility to provide an effective response to preserve the safety and welfare of the community, including senior elected and appointed leaders, such as Federal department or agency heads, Governors, mayors, tribal leaders, and city or county officials. The NRF was approved in January 2008 and supersedes all previous Federal disaster plans (DHS, 2008).

Local, state and non-governmental entities provide emergency operations plans (EOPs) which are based on the National Response Framework (NRF). The purpose of EOPs is to describe the management and coordination of resources and personnel during periods of major emergency. EOPs are developed to ensure mitigation and preparedness, appropriate response and timely recovery from natural and man made hazards which may affect county residents. These plans establish a framework for emergency management planning and response to: prevent emergency situations; reduce vulnerability during disasters; establish capabilities to protect residents from effects of crisis; respond effectively and efficiently to actual emergencies; and provide for rapid recovery from any emergency or disaster affecting the local jurisdiction. Local Emergency Management Agencies (EMAs) develop EOPs in partnership with local government and community agencies/organizations. The EOPs contain emergency support functions (ESFs) which designate primary and support responsibilities among government and non-governmental agencies in response to an incident.

The NRF outlines various emergency support functions (ESFs) which provide a structure for government and non-governmental agencies to coordinate functional capabilities and resources in response to an incident. ESFs identify primary and supporting agencies with responsibilities to provide key resources, personnel and services in the event of an incident. An ESF primary agency is an agency with significant authorities, roles, resources or capabilities for a particular function within an ESF. ESFs may have multiple primary agencies and the specific responsibilities of those agencies are articulated within the relevant ESF annex. Support agencies are those entities with specific capabilities or resources that support the primary agency(s) in executing the mission of the ESF. ESF primary agencies notify and activate support agencies as required for the threat or incident. Each ESF primary and supporting agency is required to develop standard operating procedures and notification protocols and to maintain current rosters and contact information (DHS, 2008).

Although the titles and responsibilities of the ESFs may change from agency to agency, there are ESFs that deal specifically with mass care, emergency assistance, housing, human services, public health and medical services. In the NRF, ESFs delineate the roles, capabilities and resources that are necessary to provide emergency relief services to the public. Mass care generally includes sheltering, feeding operations, emergency first aid, bulk distribution of emergency items, and collecting and providing information on victims to family members. Emergency assistance involves immediate needs beyond the scope of the traditional "mass care" services provided at the local level are addressed. These services include: support to evacuations (including registration and tracking of evacuees); reunification of families; provision of aid and services to special

needs populations; evacuation, sheltering, and other emergency services for household pets and services animals; support to specialized shelters; support to medical shelters; nonconventional shelter management; coordination of donated goods and services; and coordination of voluntary agency assistance.

The category of human services include the implementation of disaster assistance programs to help disaster victims recover their non-housing losses, including programs to replace destroyed personal property, and help to obtain disaster loans, food stamps, crisis counseling, disaster unemployment, disaster legal services, support and services for special needs populations, and other Federal and State benefits. Public health and medical services outlines the provision of medical care to a population whose members may have medical and other functional needs before, during, and after an incident. Public health and medical services also cover the medical needs of members of the "at risk" or "special needs" population and involve responding to medical needs associated with mental health, behavioral health, and substance abuse considerations of incident victims and response workers (DHS, 2008).

At the local level in EOPs, mass care, emergency assistance, housing, human services are placed under ESF #6. The mission of this ESF is to coordinate activities involved with the emergency provision of temporary non-medical shelters, housing, and human services to include emergency mass feeding and disaster welfare information of individuals and/or families impacted by a disaster or emergency. This includes expedient approval and purchasing of supplies and equipment essential to emergency or disaster operations, assistance to local governments for evacuation procedures, informing news media of emergency preparedness and response for conveyance to the public, and

facilitating the assessment of total damages including a formulated estimate of initial government expenditures resulting from an emergency or disaster.

The local government agency with primary responsibility for evacuation services is required to develop SOPs which detail their evacuation plans in the event of an incident. These plans are expected to include a system to move their population in an orderly manner, identify personnel and resources needed for an evacuation, and a method for dissemination of evacuation routes and other pertinent information. The local government agency with primary responsibility for public information services is required to develop SOPs which detail how the agency will designate a public information officer, ensure the accurate dissemination of emergency information (e.g., location, type of hazard, extent of damage, casualties, shelters open, evacuation routes and other protective actions) and develop protocols for informing the media about emergency and/or evacuation plans.

The local government agency with primary responsibility for mass care is required to develop SOPs which describe how the agency will secure shelter and feeding arrangements, open shelters, train shelter workers, provide shelter management and prepare media releases of shelter locations. Local government agencies with primary responsibility for food services are required to provide SOPs that outline how the agency intended to identify, obtain, and distribute food and water to disaster victims and emergency workers (at fixed and mobile sites) in the event of an emergency or disaster.

At the local level, public health and medical services are placed under ESF#8. During disasters, public health departments assume the role of maintaining the

health of displaced persons (Vest & Valadez, 2006). Local health departments and/or health districts are required to develop SOPs providing guidance and direction for the coordination and/or delivery of public health, environmental health, medical services and mental health services (crisis counseling); to facilitate the provision of support and services by private resources; and to coordinate the supplementation of disrupted or overburdened service resources and personnel to relieve suffering and/or trauma of victims before, during, and after an emergency or disaster. This includes emergency medical services (EMS), hospitals clinics, first aid stations, facilities, doctors, nurses, allied health professionals, technicians and support staff, supplies, pharmaceuticals, vaccines, equipment, immunizations and related services used in the detection, investigation and control of diseases and health conditions (GEMA, 2008).

Long-term care facilities house and provide services for the most frail and vulnerable of senior citizens. These individuals often have significant physical and cognitive disabilities that will likely limit their ability to perform or have performed for them one or more Activities of Daily Living (ADLs) or Instrumental Activities of Daily Living (IADLs). All long-term care facilities are required by law to provide disaster preparedness plans for their facilities (DHR, 1984). In order for a long-term care facility disaster preparedness plan to be approved, minimum requirements must be met. Long-tern facilities are required to plan for fires, explosions, unanticipated interruption of utilities used by the facility, loss of air conditioning and heat and damage to the building caused by severe weather. Disaster preparedness plans are required to clearly describe all roles and responsibilities, how plans are to be carried out and the frequency of plan rehearsals. Long-term care facility disaster preparedness plans also are required to

describe any arrangements for food, transportation and alternative living arrangements, as well as the written agreements from other agencies, facilities or institutions if portions of the plans are contingent on their participation. State regulations for disaster preparedness plans do not provide guidance on the provisions of emergency relief services in long term care facilities (DHR, 1984).

Local county senior service agencies provide a variety of services to their clients. The eligibility requirement to participate in senior services programs is age -dependent and typically begins at 55 years of age or older depending on the county (CCSS, 2007; GCBC, 2007; HCBC, 2007). Senior service agencies work closely with Area Agencies on Aging and provide information, referrals for services such as transportation, home delivered meals and caregiver services. Some senior service agencies provide their congregate feeding programs for qualifying citizens. They also provide a variety of classes and activities for senior citizens(CCSS, 2007; GCBC, 2007; HCBC, 2007). Although senior services agencies can be utilized as a contact point for services in the event of a disaster or emergency, they are not mandated to provide emergency relief services to senior citizens.

Disasters and Senior Citizen Vulnerability

Emergency management is not solely a governmental responsibility. Individuals have a responsibility to protect their own lives and property, as well as the safety of family members (Waugh, 2000). All emergency management and public health agencies stress the importance of preparing for disasters and emergencies. It is recommended that all people have 3-7 days worth of food and water, prescription lists, medical records (and

other important documents), evacuation plans and plans in place for pets. Agencies also recommend that individuals keep special needs items such as prescription medications, eyeglasses/contact lens, contact lens solution, hearing aid batteries, extra oxygen tanks and wheelchair batteries in a disaster kit (ARC-FEMA, 2004; ARC, 1996; RA, 2007a, 2007b).

Although individuals have a responsibility to plan for emergencies and disasters, local public agencies are tasked with the duty to ensure the availability of services and items necessary to respond and recover from disasters in the event that losses exceed the ability of the affected community to survive without support (FEMA, 2007; Haddow & Bullock, 2006). Preparing for impending natural disasters requires advanced planning and preparations. Given the complex logistical problems involved in disaster management, it not surprising that populations with special needs are often overlooked and underserved. The recent tragedies in managing the Hurricane Katrina Disaster is the most recent example (Penner & Wachsmuth, 2008).

Older persons are likely to be disproportionately vulnerable during disasters because they are more likely to have chronic illnesses, functional limitations, and disabilities (sensory, physical and cognitive) than are those of younger age groups (AOA, 1995; CDC, 2006; Gibson & Hayunga, 2006; Lunsford, 2000). In the past children took care of elderly parents, but now people are living longer, having fewer children and families are spread further apart (Pampel, 1998). Senior citizens might live alone (residing without other people in household), be isolated (having limited social contacts), or reclusive (choosing to remain confined to one's home).

An estimated 1,300 people were killed as a result of Hurricane Katrina in 2005. In Louisiana, roughly 71 percent of the victims were older than the age of 60, and 47 percent of those were over the age of 75 (Aldrich & Benson, 2008; CDC, 2006; Gibson & Hayunga, 2006; Lamb & O'Brian, 2008). At least sixty-eight were found in nursing homes, some of whom were allegedly abandoned by their caretakers (CDC, 2006; Townsend, 2006). In the days following Hurricanes Katrina and Rita, acute, sub-acute and chronic conditions debilitated individuals and impaired mobility. A survey of Katrina evacuees indicated that 32% of those with chronic illnesses were unable to secure the necessary to treat their conditions (KFF, 2005).

Local, state and federal agencies failed to provide for the needs of persons with disabilities during Hurricanes Katrina and Rita (Waterstone & Stein, 2006). Many evacuees lost mobility devices, casts and braces (D.M. Bloodworth, 2007). Temporary shelters lacked accessible entrances and restrooms, people with disabilities were separated from family members who provided them support, and evacuees were displaced without assistive technologies. Mainstream relief entities were severely challenged in finding medical necessities, including wheelchairs and medications, obtaining Braille and captioned information and securing personal assistive services. Less than 30% of shelters has access to American sign language interpreters, 80% lacked TTYs, 60% did not have televisions with open caption capability, and only 56% had areas where oral announcements were available (Waterstone & Stein, 2006).

Senior Citizen Defined

A senior citizen is typically defined as a person who is 65 years of age or older (Fernandez, 2002). The term senior citizen often is used interchangeably in literature with the elderly, the aged or aged individuals, and older adults. The U.S. senior population numbered 37.3 million in 2006 which represented 12.4% of the total population or about one in every eight Americans (AOA, 2007). Advances in medicine and new technologies are lengthening human life spans. A substantial portion of the U.S. population born between the years of 1946 and 1964, referred to as baby boomers, will further enlarge the senor citizen population. This will result in an increase in the total number of senior citizens and an increasing percentage of senior citizens as a segment of the total U.S. population. The U.S. population aged 65 or older is expected to almost double in size within the next 25 years. By 2030, some 72 million people, almost one of every five Americans, will be aged 65 or older (Aldrich & Benson, 2008; AOA, 2007; CDC, 2007; Dictionary.com, 2008; FEMA, 1997). Figure 1 and Figure 2 illustrate the projected increase of individuals aged 65 and older.

Figure 1: Number of people 65 and over between 1900 and projected through 2050 (FIFARS, May 2006)

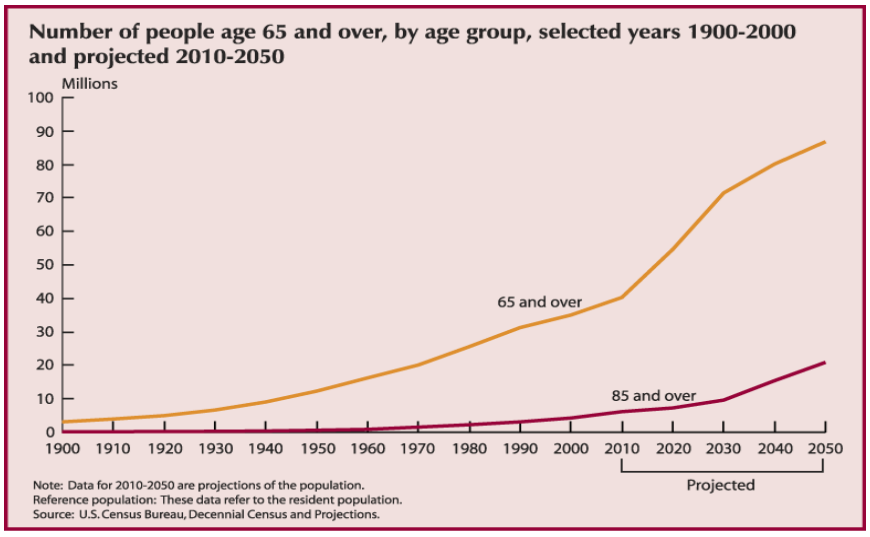
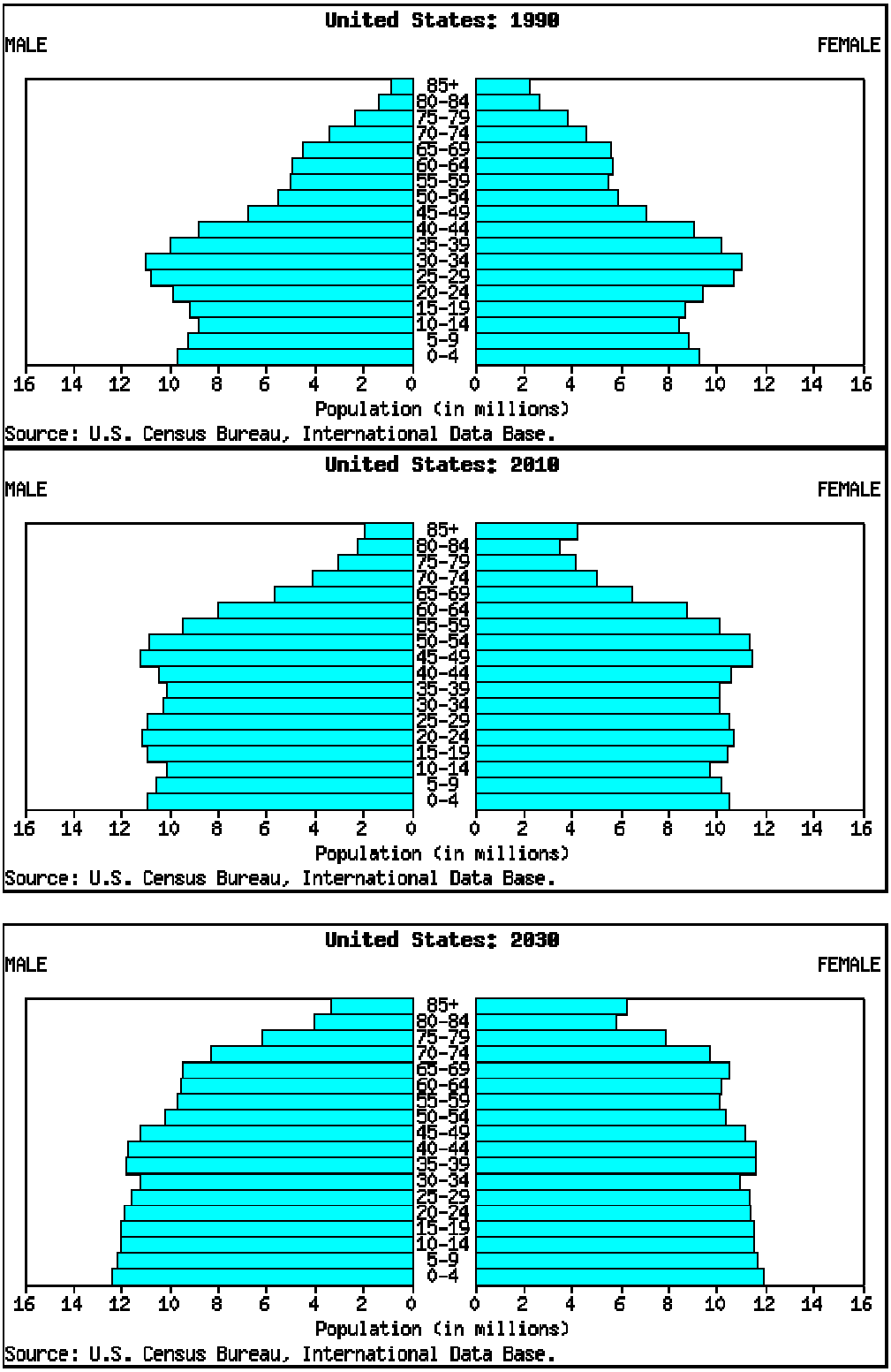


Figure 2: Population Pyramids for the United States in 1990, 2010, and 2030. (USCB, 2008b)



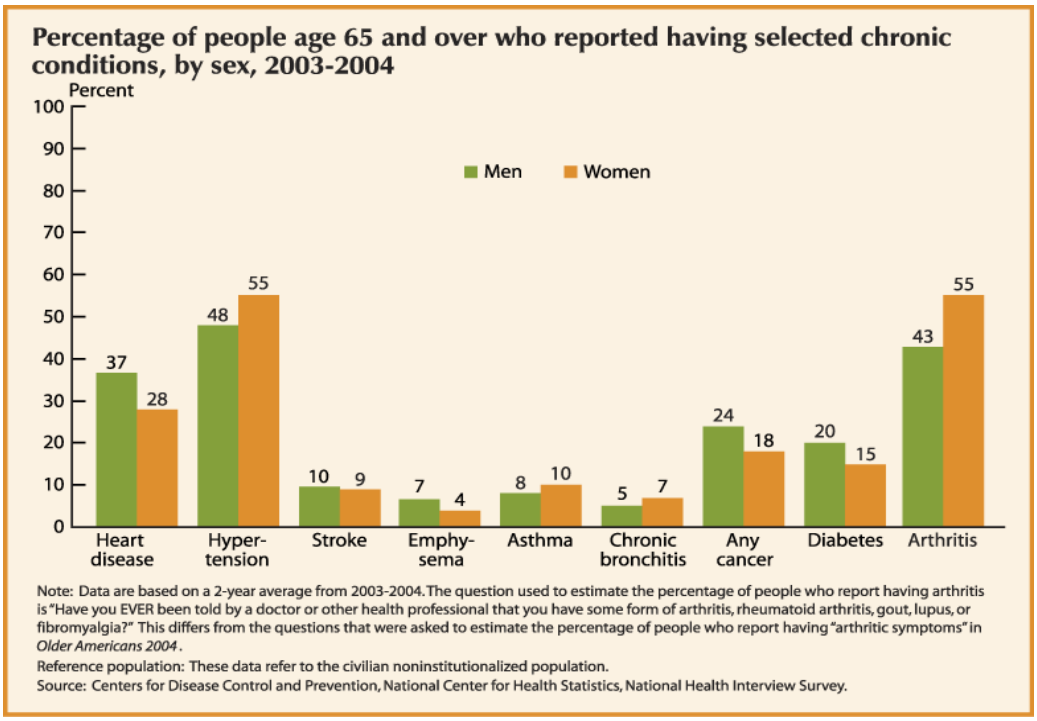
Disasters and Senior Health

Age in and of itself does not make a person vulnerable. It is the correlation between advancing age and the likelihood of having special needs that increases vulnerability. The terms vulnerable, at-risk, underserved and special needs populations are associated with specific groups or segments of a community whose needs often are not met through the traditional services provided by public and private agencies, especially during periods of local emergencies or disaster (Lunsford, 2000). As a result, people with special needs frequently are unable to safely or comfortably access and use the resources provided in disaster response (Penner & Wachsmuth, 2008). Identifying vulnerable populations before, during and after disasters help to ensure a more complete response (Hooke & Rogers, 2005).

Older persons are among the most vulnerable members of American society. Older Americans face several unique challenges in disasters. When disasters occur, they have a differential impact upon the physical, social, and psychological welfare of the elderly (AOA, 1995; Kilijanek & Drabek, 1979). The senses of vision, hearing, smell, taste and touch diminish with age, and loss can be intensified by disease (AOA, 1995; CDC, 2006; Fernandez, 2002). Many have limited mobility, cope with chronic disease, and have diminished sensory awareness (Fernandez, 2002; Gibson & Hayunga, 2006). An altered environment may expose them to heat or cold, humidity or winds, and may restrict their accessibility to required medications, special aids and equipment, or assistance from others (Eldar, 1992).

Chronic disease is one among several characteristics of aging that place older adults at greater risk during disasters. A chronic disease is one that lasts more than three months and is commonly recognized as being long-term. About 80% of older persons have at least one chronic condition and many have multiple conditions (Aldrich & Benson, 2008; Blackburn, 1988; CDC, 2007; Fernandez, 2002; Mokdad & Mensah, 2005). The probability of contracting multiple chronic illnesses increases with age. The most frequent chronic illnesses among older adults are hypertension, cancer, stroke, arthritis, and heart disease (see Figure 3) (Aldrich & Benson, 2008; AOA, 1995; Blackburn, 1988; CDC, 2006; Fernandez, 2002; FIFARS, May 2006; Gibson & Hayunga, 2006; Lamb & O'Brian, 2008; Mokdad & Mensah, 2005).

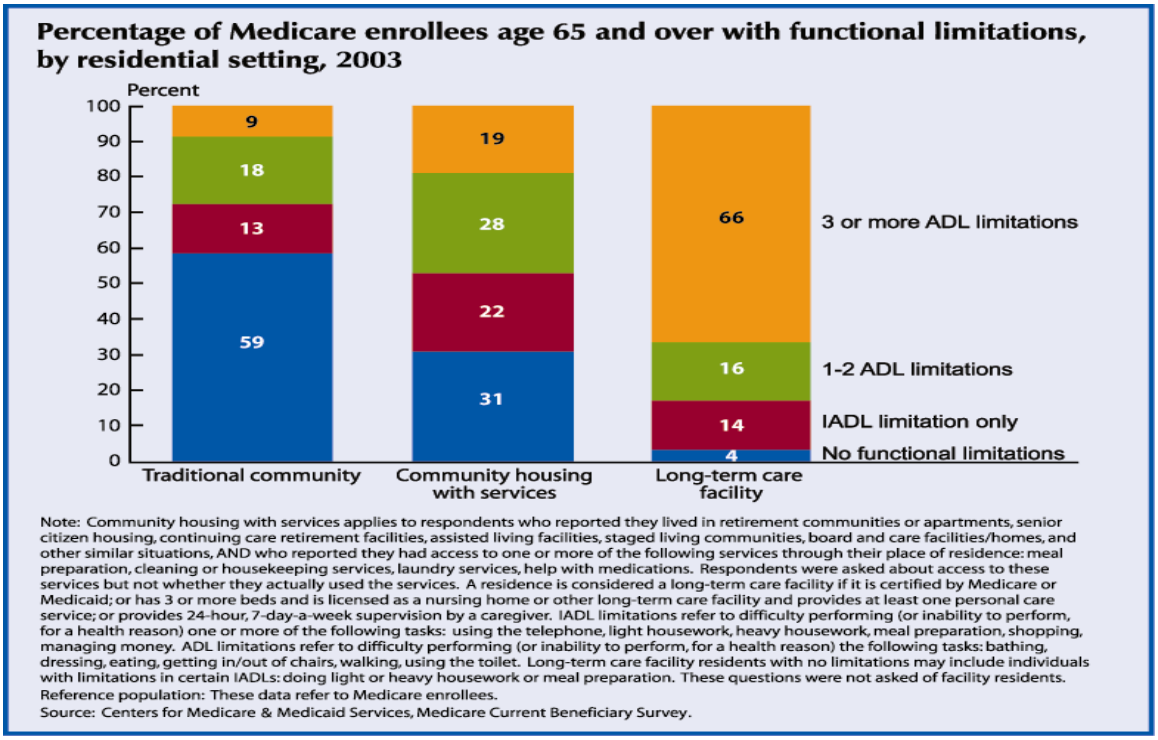
Figure 3: Percentage of people 65 and over with selected chronic conditions. (FIFARS, May 2006)



Heart disease accounts for a substantial amount of morbidity, disability and inactivity in older people and is the principal cause of death in this age group (Blackburn, 1988; CDC, 1990, 1999). Among the most frequently occurring conditions in older persons in 2004 – 2005 were: hypertension (48%), diagnosed arthritis (47%), all types of heart disease (29%), any cancer (20%), diabetes (16%), and sinusitis (14%) (AOA, 2007).

Another prominent symptom of aging is deteriorating physical ability. Chronic health conditions negatively affect quality of life, contributing to declines in functional ability to remain in the community (independent living) (FIFARS, May 2006). Chronic conditions often lead to disabilities and the inability to perform basic activities of daily living (ADLs) such as bathing, dressing, eating, and moving around the house (Aldrich & Benson, 2008). Individuals aged 65 and older often have physical, cognitive, social and psychological circumstances that limit their ability to perform one or more Activities of Daily Living (ADLs) or Instrumental Activities of Daily Living (IADLs). These disabilities are intensified by disease conditions and complications from medications or medical treatments. Managed care has increased the likelihood that medical services seniors previously received in hospitals, nursing homes, and other facilities are provided at their place of residence (Fernandez, 2002). Figure 4 shows the percentage of Medicare recipients over the age of 65 with functional limitations by residential setting in 2003.

Figure 4: Percentage of Medicare enrollees 65+ with functional limitations by residential setting in 2003 (FIFARS, May 2006)



Reported cases of disability increases with age (AOA, 2007). In 2002, 52% of older persons reported that they had some type of disability (sensory, physical or mental). Some of these disabilities may be relatively minor but others cause people to require assistance to meet important personal needs. Almost 37% of older persons reported a severe disability and 16% reported that they needed some type of assistance as a result (Aldrich & Benson, 2008; AOA, 2007; McGuire & Ford, 2007; Penner & Wachsmuth, 2008). More than 30% of adults over 65 reported some difficulty walking (Lamb & O'Brian, 2008). Compared with the general populations, older persons are more likely to rely on informal caregivers, such as family and friends, for assistance with tasks of daily

living. Over 90% of persons 65 or older with disabilities who receive assistance receive informal care (Gibson & Hayunga, 2006).

Senior citizens often experience serious economic and social problems that limit their resources for personal emergency preparedness (Fernandez, 2002; Gibson & Hayunga, 2006; Penner & Wachsmuth, 2008). The elderly have fewer opportunities and less ability to generate income, are increasingly reliant on Social Security benefits, and are more likely to live near or at poverty level than the non-elderly ((CDC), 2006; Kilijanek & Drabek, 1979). The elderly can be more vulnerable to property damage due to lack of insurance, a smaller financial cushion, and poor credit-worthiness due to fixed income and lack of employment. They do not utilize financial aid sources as much as other age groups simply because they do not meet the qualifications to obtain such assistance. For example, many elderly on fixed incomes cannot qualify for low-interest, small Business Association (SBA) disaster loads to rebuild property (Fernandez, 2002). Senior citizens often are not able to maintain the recommended 3-7 day supplies of food, water, medication and other essentials due to financial constraints (Penner & Wachsmuth, 2008).

The elderly receive less proportionate aid in the aftermath of a disaster than do their younger counterparts (Fernandez, 2002; Kilijanek & Drabek, 1979; Langer, 2004). Nearly all aid accepted by elderly was offered, not requested. Additionally, the elderly have expressed an unfounded concern that the receipt of aid may impact their other sources of funding, causing a loss of benefits if they exceed an income limit. Older persons are often reluctant to accept any public assistance because of the perceived stigma of receiving “welfare” and belief that if they accept assistance, other more needy

persons will go without ((AOA), 1995; (CDC), 2006; Fernandez, 2002; Gibson & Hayunga, 2006).

Senior citizens who are house-bound, socially isolated, or who have impaired mobility may be compromised in their ability to respond and recover from disasters. Transportation is one of the greatest limitations for senior citizens during a disaster, primarily due to physical limitations. Often individuals must rely on neighbors and relatives or public transportation (AOA, 1995; CDC, 2006; Fernandez, 2002; Lamb & O'Brian, 2008; Langer, 2004). American culture places a high premium on independence and self-reliance, and as a result, people feel uncomfortable when they need to ask for assistance. (Langer, 2004) The fear of losing independence or being institutionalized often affect senior citizens' decision to seek aid. Few adults move into nursing homes voluntarily, and life in these institutions has been found to lead to psychological deterioration (Gibson & Hayunga, 2006; Langer, 2004; SEMA, 2007). Some adults, aware of diminished capabilities, may fear that they will risk being placed in a nursing home if their condition become known to workers (AOA, 1995; IFAS, 1999; Lamb & O'Brian, 2008; McGuire & Ford, 2007). One recent study found that senior citizens feared loss of independence and institutionalization more than they feared death (PMR & Clarity, 2007).

Public Health's Role

Public health is that branch of the health field that is responsible for protecting the health of the entire population. The role of public health is to ensure the conditions necessary for people to live healthy lives through community-wide prevention and

protection programs. The fundamental obligations of agencies responsible for public health are to: 1) prevent epidemics and the spread of disease; 2) protect against environmental hazards; 3) prevent injuries; 4) promote and encourage healthy behaviors and mental health; 5) respond to disasters and assist communities in recovery; and 6) assure the quality and accessibility of health services (Shoaf & Rottman, 2000).

Disasters may be considered a public health problem for many reasons. They cause unexpected number of deaths, injuries, and illness in the affected community (Hooke & Rogers, 2005; Noji, 1997). Disasters destroy local public services and systems, such as hospitals and clinics, preventing them form being able to respond to the emergency. Disasters may trigger large, spontaneous or organized population movements, often to areas where health services cannot cope with the new situation. Disasters also can disrupt the provision of routine health services and preventive activities leading to long-term health consequences in terms of increased morbidity and mortality (Hooke & Rogers, 2005; Noji, 1997; Penner & Wachsmuth, 2008).

States are tasked with the responsibility of pubic health and safety (Haddow & Bullock, 2006). Public health's role in disaster situations traditionally focused on preserving lives and providing short-term needs such as transportation, shelter, ensuring safe food, water, and sewage disposal; and controlling infectious disease, environmental risks and pests (Aldrich & Benson, 2008; CDC, 2006; Hooke & Rogers, 2005; Mokdad & Mensah, 2005). The September 11, 2001 terrorist attack in New York City created a greater awareness of the needs of the chronically ill population, but it was not until the catastrophic hurricanes struck the Gulf Coast in 2005 that public health and other

professionals fully grasped the urgency of addressing the unique health needs of vulnerable populations during disasters (Aldrich & Benson, 2008).

Public Health considers not only the immediate causes of disease or premature death, but also the social, economic, cultural and health care system factors that predispose to ill health or that promote a longer quality of life (Peterson & Alexander, 2001). Inadequately controlled chronic diseases may present a threat to life and well-being in the immediate wake of natural disasters. Many disaster survivors have chronic illnesses that may be worsened by post-disaster conditions. The exacerbation of chronic medical conditions can contribute substantially to the public health burden of disaster. Chronic illnesses in disaster survivors, such as high blood pressure and diabetes, worsen from exposure to temperature extremes, lack of food or water, and physical and emotional trauma (CDC, 2006; Fernandez, 2002; Mokdad & Mensah, 2005). Older adults with chronic conditions often have special dietary requirements and may face additional health risks from inadequate nutrition or from the high levels sodium, fat, and sugar in meals served in congregate shelters (Aldrich & Benson, 2008; Fernandez, 2002; Mokdad & Mensah, 2005; Vest & Valadez, 2006).

The need to treat chronic conditions is especially magnified when there are catastrophic disruptions of the medical infrastructure (including pharmacies), when access to medical care and medications is severely compromised or totally cut off, and when large-scale evacuations of the population occur. When disasters compromise health resources such as medication and necessary medical technologies, the elderly may find it difficult to manage their own chronic conditions. Many older persons with multiple

chronic conditions have complicated, individualized medication regimens that cannot be interrupted without serious or possibly fatal complication (Gibson & Hayunga, 2006).

Chronic diseases requiring medications, treatment and management are substantial burdens in displaced populations. A prevalence of chronic conditions requires adequate, durable, medical and pharmaceutical supplies, such as syringes, sharps containers, and diabetes testing supplies. Hypertension, asthma, and diabetes medications also are required. Additionally, many pharmaceuticals supplies must be stored at cool temperatures, therefore requiring refrigerator or coolers and ice (Vest & Valadez, 2006). Ensuring access to adequate medical supplies is integral to successful disaster relief efforts (Ford & Mokdad, 2006).

The proportion of adults aged 65 and older receiving home health care services has dramatically increased from approximately seven million in 1992 to 14.1 million in 2000 (McGuire & Ford, 2007). During a disaster and in its aftermath there is likely to be a disruption of regular services, such as meals on wheels and other forms of daily living (ADL) assistance. Disaster related electrical outages can affect life support equipment, such as oxygen generators, ventilators or electric wheelchairs (McGuire & Ford, 2007). Interruption in the continuity of services can create situations where people are left waiting on assistance with their activities of daily living, hygiene, eating, meals-on-wheels, and medication for days at a time (Aldrich & Benson, 2008; AOA, 1995; ARC-AAA, 2008)

The American Public Health Association has stated that it is the responsibility of public health agencies, and the community at large, to link people to needed personal health services and assure the provision of health care when otherwise unavailable

(APHA, 2007). Public health professionals advocate and work for the empowerment of disenfranchised community members, aiming to ensure the basic resources and conditions necessary for the best possible physical and mental health (IOM, 1988; PHLS, 2002). The Institute of Medicine identifies assessment as one of the three core functions of public health, in conjunction with policy development and assurance (IOM, 1988; Novick & Mays, 2008; Peterson & Alexander, 2001; Vest & Valadez, 2006). The public health assessment function is described as the responsibility of every public health agency to "regularly and systematically collect, assemble, analyze and make available information on the health of the community including statistics on health status, community health needs and epidemiologic and other studies of health problems (Novick & Mays, 2008; Peterson & Alexander, 2001).

Needs assessments can be used to validate the current populations in needs of services as well as to identify new populations with unmet needs(Peterson & Alexander, 2001). Need is defined as a gap between real and ideal conditions that is both acknowledged by a community and potentially amenable to change (Reviere, 1996). Assessing needs is usually done with the idea that a demonstration of the unmet needs of some part of the population has a probability of producing a response by some agency having the capacity, responsibility, and or resources to respond (Hobbs, 1987). The research outlined in the next chapter was focused on the assessment of emergency operations plans (EOPs) of emergency relief agencies and organizations in the Atlanta Metropolitan Area for the provision of emergency relief services utilized by senior citizens as a special needs population.

CHAPTER III

METHODS AND PROCEDURES

While there is a large volume of literature on disasters, little has been published about older adults during disaster planning, response and recovery. Due to the effects of age, illness or disability, senior citizens may require medical equipment, prescription drug replacements, social services, accessible transportation and other services as they transition from their home to a shelter and from the shelter back to their housing or temporary replacement housing (Penner & Wachsmuth, 2008). Many local and state governments have frequent opportunities to use their emergency plans because of experiences with severe weather. However, a poorly designed, unevaluated or inadequately evaluated plan may do more harm than good if it leads to a false sense of security, resulting in poor performance during an actual emergency (Gebbie & Valas, 2006). Adequate response planning for local and displaced persons must address basic shelter operations, as well as those factors that may complicate care or future placement plans, such as chronic medical conditions and disability (Vest & Valadez, 2006).

This study was performed in the ten county area defined as region 3 by the State of Georgia. This region also is referred to as the Atlanta metropolitan area by the Atlanta Regional Commission's Agency on Aging (see Appendix H) (ARC-AAA, 2005; ARC-AAA, 2007; GA.gov, 2008). The Atlanta metropolitan area was chosen for this study for several reasons. Georgia, like many other states, is susceptible to a number of natural, man-made, and technological disasters (GEMA, 2008). Based on the Census data,

Georgia is ranked as the 10th most populous state in the U.S. (GDCA, 2006; USCB, 2008a). Georgia has the eighth fastest growing older adult population in the country, ranking just after traditional retirement destinations like Florida, New Mexico and Arizona (AOA, 2007; ARC-AAA, 2007).

In 2006, 79.5% of persons 65 and over lived in U.S. metropolitan areas (AOA, 2007). From 2000 to 2005, the older adult population grew by 30.6%, more than double the rate of growth in the area's population during the same period of time. Growth in the older adult population exceeded growth in the total population in all but one of the area's counties (See Figure 5 and Table 1). The aging population in the Atlanta metropolitan area is expected to double between 2000 and 2015 (ARC-AAA, 2007).

Figure 5: Percentage of population change between 2000 – 2005 for adults aged 55 and over versus the total population in the Atlanta metropolitan area (ARC-AAA, 2007).

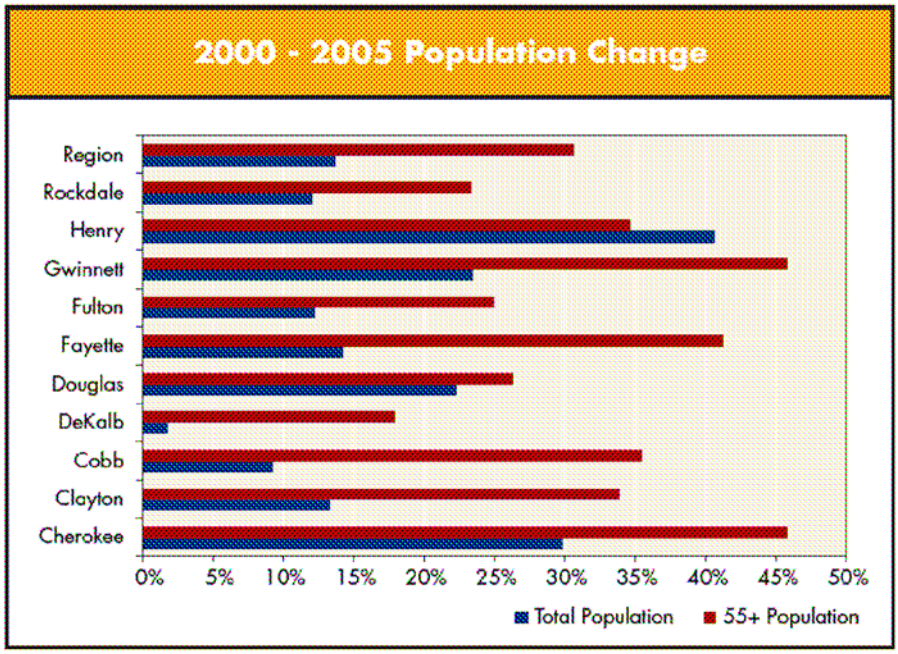


Table 1: Estimated number of people aged 65 or older in State of Georgia Region 3: Metropolitan Atlanta Counties in 2006 (USCB, 2008c)

State/County	Estimated Total Population	Estimated Population aged 65+	Percent of Population aged 65+
Georgia	9,363,941	908,302	9.7%
Cherokee	195,327	14,064	7.2%
Clayton	271,240	18,173	6.7%
Cobb	679,325	55,025	8.1%
DeKalb	723,602	60,783	8.4%
Douglas	119,557	8,489	7.1%
Fayette	106,671	11,200	10.5%
Fulton	960,009	76,801	8.0%
Gwinnett	757,104	44,669	5.9%
Henry	178,033	12,640	7.1%
Rockdale	80,332	7,471	9.3%

In order to determine the most appropriate public health and emergency management organization contacts, state and local emergency management agencies (EMAs) and public health liaisons were contacted and a copy of their current EOP was requested (see Appendix a for agency listing). Upon receipt of the EOPs, the document was reviewed and the ESFs that provided emergency relief services to the public were determined. The primary agency(s) listed were contacted and the liaison (if available) was identified. The liaison was asked to provide a copy of their agency EOP, disaster plans, SOPs or other appropriate documents. The liaison also was extended an invitation to participate in a brief online survey (Appendix B). If the EMA was not listed as a primary agency, the invitation to participate was still extended. Among the agencies that were not listed as primary agencies in collected EOPs, but were invited to participate included the Georgia Division of Aging Services, Georgia Office of Regulatory Services, The Atlanta Regional Commission/ Area Agency on Aging, The Salvation Army, The United Way and county senior services agencies. These agencies often were listed as support agencies in EOPs, but their role in providing emergency relief services or in providing services to senior citizens established a need to include them in this research.

Long-term care facilities house and provide services for the most frail and vulnerable of senior citizens. These individuals often have significant physical and cognitive disabilities that will likely limit their ability to perform or have performed for them one or more Activities of Daily Living (ADLs) or Instrumental Activities of Daily Living (IADLs). All long-term care facilities are required by law to provide disaster preparedness plans for their facilities (DHR, 1984). The Office of Regulatory Services maintains copies of disaster plans for all long-term care facility in the state of Georgia.

There are 81 long-term care facilities in the 10 –county Atlanta Metropolitan area defined in this study. Twenty percent (sixteen) of these long-term care facilities were randomly chosen for review, with at least one facility located in each county (see Appendix C).

RESEARCH AND ANALYSIS DESIGN

The research and analysis performed was completed in two steps: a review of collected EOPs and other disaster plans, and a qualitative analysis of a brief survey.

Review of EOPs and other Disaster Plans

Participating agency/organizations plans were reviewed to:

a) Obtain definition of target population group(s);

b) Identify emergency relief services/items to be provided to their target population group(s); and

c) Identify annexes, protocols or special references (if any) relating to senior citizens or special needs populations and determine if provisions were made for emergency relief services and items likely to be needed by senior citizens (as determined by the survey).

Some EOPs and disaster plans utilized ESFs as a means delineate the roles, capabilities and resources that are necessary to provide emergency relief services to the public, while other plans did not. If ESFs were utilized, the primary focus of the review was on ESFs that dealt specifically with mass care, emergency assistance, housing, human services, public health and medical services. The plans for Mass Care Services, Food Services, Evacuation Services and Public Information Services, and Public Health and Medical Services were emphasized in this research because they directly correlate

with emergency relief services senior citizens would need in the event of a disaster. If ESF were not utilized in the disaster plans, study emphasis remained on the provision of emergency relief services and items likely to be needed by senior citizens.

Survey Analysis

A brief survey was developed by the study author with guidance from a Special Programs Manager from the Atlanta Regional Commission Area Agency on Aging. This survey was intended for emergency preparedness liaisons representing state, local and non-governmental agencies. In order to determine the most appropriate public health and emergency management organization contacts, state and local emergency management agencies (EMAs) and public health liaisons were contacted and a copy of their current EOP was requested (see Appendix a for agency listing). Upon receipt of the EOPs, the document was reviewed and the ESFs that provided emergency relief services to the public were determined. The primary agency(s) listed were contacted and the liaison (if available) was identified. These liaisons were verbally invited to participate in this portion of the research and all liaisons accepted the invitation. These liaisons were emailed the informed consent document that explained the purpose of this research and provided a link to the online version of the survey. The goal of the survey was to identify agency provided emergency relief services that may not have been listed in their respective emergency/disaster plans. This survey also would help to identify any gaps in emergency relief services not clearly identified from the disaster plans.

The Georgia Department of Human Resources Office of Regulatory Services was not asked to participate in the survey as it does not directly provide services to senior citizens or the population in general. The sixteen long term care facilities whose disaster plans were reviewed were not asked to participate in the survey because they are private entities that are paid to provide services to their clients. The services they provide to their clients effectively included all of services and items identified in the survey, hence making the distribution of the survey unnecessary.

The survey consisted of a series of short answer and 'yes and no' questions with space available for additional comments. The survey was voluntary and subject confidentiality was maintained. The results from all participants were pooled together by ESF primary agency responsibility (e.g., Mass Care, Food Services, Evacuation, Public Health, etc.). If the agency/organization did not utilize ESFs, it was placed under the ESF primary agency responsibility that most directly relates to its primary function or service. For example, if a senior services agency had sheltering responsibilities, this organization was placed under the ESF primary agency responsibility of Mass Care. Once the results were pooled together, the study author analyzed the responses by:

a) Totaling the number of yes, no and null responses;

b) Reviewing any additional comments; and

c) Determining if the agency or organization with primary responsibility for providing the service either directly provided the service or provided the service indirectly through another agency or organization.

CHAPTER IV

RESULTS

EOPs/ Disaster Plans

Forty-nine percent of agencies and organizations contacted by the study author responded to the request for plans and information. A list of these agencies and organizations can be found in Appendix C. All EOPs referred to the residents of their counties and districts as the persons they provide services to during emergencies. All EMA and public health EOPs utilized ESFs as a means to define the roles, capabilities and resources during an incident. The ESFs that dealt specifically with the provision of emergency relief services were consistently titled as ESF #6 (mass care, emergency assistance, housing, human services) and ESF#8 (public health and medical services).

Each county EMA ESF#6 identified primary agencies with distinct responsibilities during an incident. The responsibilities were labeled uniformly as Information and Planning Services, Resource Support Services, Evacuation Services, Public Information, Damage Assessment, Mass Care Services and Food Services. ESF#6 briefly listed emergency preparedness actions which include establishing communication resources to provide people with sensory disabilities (e.g., vision and hearing impaired) and non-English speaking persons with emergency management information regarding emergencies or disasters, but did not provide any details on how these actions should be implemented. All primary and supporting agencies are required to create SOPs or some

other form of documentation which details how they intend to provide the services assigned to them in the EMA EOP. No primary agency responsible for public information services provided an agency based SOP, EOP, disaster plan or other appropriate documentation for further evaluation in this study.

The primary agency listed in all EOPs for mass care was the Department of Family and Children Services (DFCS) with the American Red Cross as the supporting agency. DFCS is responsible for inspecting and opening all shelters (with the exception of special needs shelters), then providing non-medical staff and support assistance to the American Red Cross. DFCS plans indicated that The American Red Cross only opened "approved shelters" during disasters and other emergencies. County EMA EOPs did not reference any definitions of what constituted an 'approved shelter' or shelters being required to meet handicap accessibility requirements. DFCS plans did not define any requirements for approved shelters, but did state that planners should assume that there would be individuals with special mental and physical needs and local shelter plans must provide accommodations for these populations.

The decision to open a special needs shelter was the ultimate responsibility of the district public health director or his/her designee. Special needs shelters serve individuals whose health conditions, as assessed by public health, warrant supplemental care not available in congregate shelters. This includes people with minor health or medical conditions that require professional observation, assessment, and maintenance and cannot be handled by the congregate shelter staff or exceed the capability of the congregate shelter. These individuals do not require hospital admission, but require a higher level of care than the general population. The local public health district or department is

responsible for providing appropriately trained medical staff in special needs shelters (with DFCS providing non-medical staff and support functions). The American Red Cross does not operate or staff special needs shelters in Georgia.

There was no mention of the provision of foods for persons who have special dietary requirements due to old age or disability (e.g., low sodium foods for people with hypertension and low sugar foods for persons with diabetes) in any EMA EOPs with the exception of Fayette County. No primary agency with responsibilities to provide food service provided an EOP, disaster plan, SOP or other appropriate documentation for review in this study. All of the public health district and department plans mention the provision of foods for people with special dietary foods, but did not provide any specific plan or SOP that outlined how they intended to provide this service.

By reviewing county EMA EOPs the study author established that ESF#6 assigns a primary agency with transportation responsibilities during a disaster. It also was noted that the primary function of ESF#6 is not transportation; ES#1 is the ESF dedicated solely to transportation provision and public transportation recovery following a disaster or event. Because of this, ESF#1 was reviewed in conjunction with ESF#6. Neither ESF#1 nor ESF#6 referenced senior citizens, special needs populations, or the provision of handicap accessible transportation options. Local level public health agencies have a responsibility to provide services for special needs populations during disasters. The study author was not provided a SOP on special needs transportation from local public health agencies, however, the Georgia Department of Human Resources Division of Public Health provided an SOP on the process of evacuating special needs populations

from coastal areas. No primary agency responsible for evacuation services provided an EOP, disaster plan, SOP or other appropriate documentation for evaluation in this study.

With the exception of Fayette County, local EMA EOPs did not make specific reference to senior citizens or services that they might need in the event of an emergency. Fayette County also differed in that fact that Fayette County Department of Family and Children Services (DFCS) is listed as the sole primary agency in ESF#6. Fayette County DFCS is responsible for the coordination of activities involved with the emergency provision of temporary non-medical shelters, housing, and human services to include emergency mass feeding and disaster welfare information of individuals and/or families impacted by a disaster or emergency.

At the local level, public health and medical services are placed under ESF#8. During disasters, public health departments assume the role of assuring the health of displaced persons. Local health departments and districts EOPs did refer to the provision of medical services for special needs populations but did not specify what these provisions were. Health department EOPs, SOPs and annexes outlined the process for securing and providing pharmaceuticals to their target population during an incident, but did not specifically reference the provision of common medications used to manage chronic disease. The EOPs did not mention the provision of dialysis services or the transportation of individuals to approved dialysis centers or long-term care facility placement services. They also did not specify the provision of items of assistive devices or durable medical equipment such as eyeglasses, hearing aids, canes, and wheelchairs.

County Senior Service Agencies

Senior Service agencies often provide copies of their disaster plans to their local Area Agency on Aging. The Atlanta Regional Commission Area Agency on Aging provided the author with all available senior service agency disaster plans for review (see Appendix C).

The format of the senior service agency disaster plans varied from county to county. The majority of the plans provided either a list of resources provided in senior service facility and/or contact lists. A small number of counties provided all hazard disaster plans detailing protocols to be followed in the event of a disaster or emergency. None of the senior service agency disaster plans included arrangements for the distribution of emergency relief services to senior citizens or the population at large.

Long-Term Care Facilities

The Georgia Department of Regulatory Services (ORS) has copies of disaster preparedness plans for all long-term care facilities in Georgia. There are 81 long-term care facilities located in the Atlanta metropolitan area. ORS provided a sample of sixteen randomly selected long-term care facilities (20% of all Atlanta metropolitan facilities) for review, with at least one facility located in each county. See Appendix C for list of facilities.

All of the disaster plans demonstrated the minimum requirements as required by law. All long-term care facilities identified their residents or clients and staff as their target population groups. The disaster plans did not follow a standard format and varied

in the level of detail provided. The vast majority of the plans were extremely basic, meeting only the minimum standards necessary for compliance. A small number of facilities provided disaster preparedness plans that exceeded the minimum standards.

The plans that exceeded minimum standards included:

- Clear and detailed evacuation plans;
- A list of recommended items that should be available on site and brought with residents upon evacuation including: personal hygiene items, clothes, personal adaptive aids (glasses, teeth, hearing aids, prosthetics), linens, medications and medication charts, medical charts, durable medical equipment (IV poles, wheelchairs, canes, bedside commodes);
- A clear policy on the amount of food and water per person to be stored on site; and
- A clear protocol for contacting resident family or legal guardians following a disaster or other emergency situation.

The long-term care facility disaster preparedness plans differed in the amount and types of aid agreements. There were agreements with vendors, organizations, hospitals and institutions for food, water, transportation, generator fuel, shelter, medical care and durable medical equipment (e.g., oxygen tanks), but not all facilities had agreements for all of these items. Some facilities had several agreements for each type of aid, others just had one. There was considerable variation in the sheltering agreements for services to be provided while on-site and the length of time the residents could shelter on the premises.

Several of the facilities had sheltering agreements with other facilities owned by the same corporation or group and most with local hospitals. A number of long-term care facilities had transportation agreements with the same companies. Many chose to use their local 911/EMS as a method of resident transportation. Although all disaster plans gave instructions for the appropriate staff member to contact the Georgia Office of Regulatory Services in the event of an emergency situation, no plans gave instruction to contact their local EMA or public health department or district for support (if deemed necessary).

Survey Results

A brief survey was developed and sent to forty liaisons representing state, local and non-governmental agencies. They were verbally invited to participate in this portion of the research and all liaisons accepted the invitation. These liaisons were emailed the informed consent document that explained the purpose of this research and provided a link to the online version of the survey. The response rate was 25 percent with ten of forty liaisons choosing to participate. The results discussed herein were submitted by: two state agency liaisons, two emergency management liaisons, two public health liaisons, three county senior services liaisons and one DFCS liaison. Due to the low response rate, the results of this survey could not be evaluated as outlined in the Methods and Procedures section of this paper. The results of this survey can be found in Appendix D.

Based on the survey answers given, there appeared to be several emergency relief services and items with low levels of provision. Many of these services and items were provided by a single agency (e.g., mental health services, emergency medical services), therefore giving the false appearance of low levels of provision. Several other services

and items (e.g., clothing, personal care items, eyeglasses/contact lens and durable medical equipment) were not provided by any participating agency. Liaisons indicated in the comment section of the survey that requests for these items would be directed towards an array of non-governmental organizations. There also appeared to be a gap in the provision of dialysis services or transportation to dialysis centers. Although no agency or organization directly provides this service, very few indicated the provision of transportation to an approved center.

DISCUSSION

It was difficult to assess EOPs for emergency relief services utilized by senior citizens because EOPs are considered highly sensitive documents by public health, EMAs and other emergency management and aid organizations. Many EOPs were available in public and private formats, with the latter containing the names, phone numbers and email addresses of key personnel. Even when public plans were available, access to the documents were initially denied. Emergency management and public health liaisons both stated concerns about EOPs being reviewed by potential terrorists for potential weaknesses. Many public health and emergency management liaisons acknowledged that the documents should be available to the public for review, but were unsure of the current policy and their ability to release them partially or in full.

Once emergency management and public health liaisons gained the appropriate approval necessary, the EOPS were collected and reviewed. The agencies with primary responsibilities for ESF#6 and ESF#8 were contacted. In some counties EMA personnel were considered employees of the primary agency (e.g., County Board of Commissioners

and Sheriff's Department). Many agencies were unsure or unable to provide a contact person or liaison with emergency preparedness responsibilities. These agencies referred all inquiries and requests back to their county EMA offices. Many primary agencies either chose not to return correspondence with the author or declined access to their EOPs or SOPs.

Because the study author was unable to access and review all agency EOPs, liaisons were contacted via telephone and questioned about their EOP/SOP evaluation and approval process. While liaisons stated that emergency management, public health and non-governmental agencies work closely together, all EOP, SOPs and disaster plans are developed and approved independently of each other. GEMA liaisons stated that they provided a template to each county be used in the formation of their EOPs. Once the EOPs were completed, GEMA reviewed and approved the plans. Public health liaisons stated that their EOPs are reviewed and approved by their respective District Health Officers. All other ESF primary agencies stated that their developed disaster plans, EOPs, or SOPs for their respective Department Heads review and approve.

The EOPs collected provided very little insight into the delivery of emergency relief services. All EOPs followed the same general format with very little deviation. The vast majority of provided disaster plans, EOPs, SOPs and other documents failed to clearly and concisely outline agency procedures personnel would follow in the event of an emergency. If an ESF referred to the delivery of a service, it did not provide any guideline on how the delivery of the service should occur. For instance, all public health EOPs stated that all requests for emergency clothing, bedding and other items lost, damaged or destroyed as a result of an emergency or disaster will be forwarded to

volunteer organizations. These same EOPS did not provide or refer of a list of organizations to call or which organizations provided specific items or services.

The EOPs and SOPs collected did not specify the services and items provided to the public in the event of an emergency. ESF#6 requires that food, shelter, evacuation services and public information be provided in the event of an emergency. EOPs stated that nutritionally appropriate food for special needs populations would be provided, but did not detail how they would go about providing this service. EOPs failed to define what constitutes an approved emergency or congregate shelters. Public Health agencies were very specific in defining Special Needs Shelters and outlining how they would be opened and staffed, but did not elaborate on the procedures for handling special needs populations in congregate shelters. EOPs did not specify if evacuation transportation included handicap accessible vehicles. EOPs stated that information disseminated to the public should include methods to reach those who are visually and hearing impaired, but did not detail how they would go about providing this service.

ESF#8 encompasses the public health and medical services aspect of services provided in the event of an emergency. The EOPs, SOPs and supporting documentation collected stated that public health departments would assume the role of assuring the health of displaced persons during disasters and provided some detail of guidance about the delivery of public health, environmental health, medical services and mental health services. Emergency management and public health agencies did not clearly define the roles that non-residential providers outpatient clinics, mental health providers, dialysis centers, hospices, pharmacies, and physicians would play in providing emergency relief services. Local health departments/districts EOPs did refer to the provision of medical

services for special needs populations but did not specify the provision of items of assistive devices or durable medical equipment such as eyeglasses, hearing aids, canes, and wheelchairs. Furthermore, the EOPs and SOPs did not provide a policy regarding the distribution of medication to populations with chronic disease.

Public health and emergency management EOPs superficially mention special needs populations and the provision of services and items to people with varying needs. Special needs populations include people with a variety of visual, hearing, mobility, cognitive, emotional, and mental limitations, as well as older people, people who use life-support systems, people who use service animals, and people who are medically or chemically dependent. Pre-existing physical limitations cause significant difficulties during disasters. Many older adults utilize some type of assistive equipment such as canes, wheelchairs, walkers, or medical equipment, such as oxygen (Gibson & Hayunga, 2006). Many older adults who have a disability or who have health conditions that require special equipment rely on routine health services, such as home health care, to maintain their quality of life and their ability to live independently. Studies indicate that the elderly have higher injury and disaster related deaths rates than other age groups (Fernandez, 2002; SEMA, 2007).

Title II of the Americans with Disabilities Act requires that State and local governments give people with disabilities an equal opportunity to benefit from all of their programs, services, and activities (ADA, 1990). Because of this, it is important for emergency management and public health agencies to think about disability broadly. Traditional narrow definitions of disability are not appropriate. The National Council on Disability states that the term disability does not apply just to people whose disabilities

are noticeable, such as wheelchair users and people who are blind or deaf. The term also applies to people with heart disease, emotional or psychiatric conditions, arthritis, significant allergies, asthma, multiple chemical sensitivities, respiratory conditions, and some visual, hearing and cognitive disabilities (NCD, 2005). Public health and emergency management agencies should think about the distinct needs of this population group and make reasonable and appropriate modifications to their policies, practices and procedures to avoid discrimination on the basis of disability.

Disaster preparedness efforts often include identifying individuals living in the community who are members of special needs populations (Penner & Wachsmuth, 2008). Out of ten local counties, only Cobb and Fayette counties have special needs registries. A special needs registry is a listing of persons living independently who would require special assistance in the even to a disaster or other emergency, including those with cognitive disabilities and those who are dependent on oxygen or electricity for life support. These registries give counties the ability to more rapidly and directly assist their most vulnerable citizens in the event of a disaster. For a registry to be successful it must be kept up to date, and must be able to be accessed during a disaster. Many local county EMA and public health liaisons expressed interest in a special needs registry, but also stated that the maintenance of such a registry, combined with population mobility dynamics, made it costly and impractical.

CHAPTER V

RECOMMENDATIONS

Disaster preparedness plans must ensure the availability of all items necessary to control and prevent complications related to chronic diseases, prevent acute events and promote functionality and independence. Based on the findings of this study, public health and emergency management agencies in the ten county Atlanta metropolitan area must take steps to ensure that, in the event of a disaster, the emergency relief needs of senior citizens will be met in a timely and organized manner. Although a number of suggestions could have been presented in this chapter, the study author determined the following recommendations to be a priority for public health and emergency management agencies.

Public health and emergency management EOPs, SOPs and other disaster plans must be clear, comprehensive and functional. State agencies should provide an improved template for local government and private organizations to use in their disaster planning processes. Emergency operation plan directives and procedures should be presented in a format that any employee (or citizen) could follow and actualize. EOPs, SOPs and other disaster plans must clearly identify all emergency relief services and items, provide instructions on how to obtain emergency relief services and items and outline a system to deliver the services to the public. Public health and emergency management agencies also must provide instruction on how to supply items that are not offered by their agencies. Lists of government, private and volunteer organizations which provide

specific service and items should be included in EOPs, SOPs and other appropriate documents.

There appears to be a heavy reliance on the assistance of private and volunteer organizations to provide relief services and other forms of aid to the population. Data collected from EOPs, SOPs, disaster plans and survey results indicate that all requests for emergency clothing, bedding, personal care items, assistive devices, durable medical equipment and other items lost, damaged or destroyed as a result of an emergency or disaster are forwarded to volunteer organizations (NGOs) . One of the disadvantages to this approach is that these organizations rely on the spontaneous donation of money and items from the public and private donors. If the items are not donated, then either the population in need does not receive the needed items or there is a delay in the receipt of those items. Public health and other emergency management agencies should build relationships with private businesses within the community to supplement the efforts of volunteer organizations.

All public agencies should allow copies of their plans to be available to the public for review to ensure transparency and accountability. The study author recommends that public agencies only remove personnel contact information and terrorism related annexes and SOPs from public documents. The study author also recommends that all public agencies consent to periodic external review of EOPs and SOPs for acceptability.

Public health and emergency management agencies must develop a method to determine the number of senior citizen population in their communities, as well as the prevalence of disability and chronic illness within this population group. Emergency management and public health professionals can create more effective disaster

preparedness plans for vulnerable adults by working with aging services professionals from state and local agencies on aging, as well as local senior service providers. Local agencies on aging collect and maintain registries of senior citizens that receive services through their provider network. During a disaster these agencies reach out to their clients and identify those who need assistance obtaining food, water, shelter, or medications. If public health and emergency management agencies work with aging services professionals, they would be able to identify a number of vulnerable senior citizens in their communities without the difficulties of maintain their own registries. They also would be able to develop more effective evacuation plans that include transporting medications and supplies (like wheelchairs) with seniors, as well as plans for the deployment of food services or medical services to persons that may be mobility impaired.

Long-term care facilities are the only senior citizen congregate residential facilities required to provide disaster plans. State regulations for disaster preparedness plans do not provide guidance on the provisions of emergency relief services in long term care facilities. In spite of this, a small number of facilities provided disaster preparedness plans that exceeded the minimum standards. These plans provided a well-organized and functional outline of what a long-term care facility should do in the event of an emergency or disaster. Based on these plans, a series of recommendations have been developed. Long-term care facility disaster plan regulations should: (a) clearly indicate the amount of food and water to be provided by the facility per person per day, for a minimum number of days;(b) clearly state that facilities must develop a plan for the provision of medication and medical supplies in the event of a disaster; (c) clearly state the policy on the provision of assistive technologies and durable medical equipment; (d)

clearly describe a procedure for the provision of personal item and personal care items for their residents; and (e) develop procedures to monitor resident health information and records of persons being evacuated or relocated.

Study Limitations

The information presented in this study was limited by several factors. First, although there is a substantial amount of literature available on disasters, little has been published about assisting older adults during disasters or addressing their vulnerabilities and emergency relief needs. This made it difficult to develop a list of common emergency relief services needed by senior citizens. Second, many agencies and organizations contacted chose not to provide EOPs, SOPs, disaster plans and other documentation necessary to accurately assess the issues targeted in this study. Lastly, because of low participation, these results could not be interpreted as significant or translatable nor could they be said to represent all public health and emergency management disaster plans in the ten county Atlanta metropolitan area.

CONCLUSION

The distinctive needs of senior citizens must be considered in order for them to have an equal opportunity to survive an emergency or disaster and come through it in the best possible physical and emotional condition. It is time for public health and emergency management agencies to carefully reflect on the disaster related needs of elderly persons with physical disabilities, special medical needs and communication disabilities in the planning process. There is an assumption that the needs of senior citizens are being addressed because of the large number of social programs, but there are

several barriers that can prevent seniors from fully utilizing the services available. Many public health and emergency management personnel have a tendency to discount the impact of decreased functional abilities of seniors and view them as related to the aging process. This may cause some personnel to believe that emergency relief items, like eyeglasses or hearing aids, are luxury items instead of items necessary to maintain quality of life and a level of functionality.

Given the potential for future catastrophic events, it is imperative that local, state, federal and non-governmental organizations establish disaster plans that define services to be provided to senior citizens and other populations with special needs. Senior citizens should be included as stakeholders in the disaster planning process and have their insights and suggestions be taken into account. Public health and emergency management agencies should set minimum standards in the delivery of emergency relief services in order to prevent morbidity and mortality among people with chronic diseases and people with disabilities. Disaster preparations must anticipate and identify medical supplies, equipment, and services necessary to control and prevent complications related to chronic diseases and prevent acute events, as well as promote functionality and independence.

As our country ages, a larger proportion of our citizens will rely on governmental and public health disaster preparedness to ensure its safety and health. Emergency management and public health planners and policy makers must be willing and committed partners in all efforts to assess and respond to the needs of the elderly in disaster events. Disaster plans and standard operating procedures must be clear and functional, outlining all emergency relief activities and services and clearly defining the roles and responsibilities of all participating agencies, organizations, and private entities.

Only through collaboration and partnerships between the community, public health agencies, emergency management agencies and senior services agencies and organizations can the reduction of unnecessary deaths and trauma to our nation's elderly be achieved.

It is essential that further research be performed on disaster response and relief and senior citizens. Public health and agency management professionals should examine emergency operations plans in other metropolitan areas. The study author recommends that assessments of the capacity of state, local and non-governmental agencies to provide emergency relief services utilized by senior citizens should be performed. Public health, emergency management and regulatory agencies should evaluate the efficacy of long-term care facility disaster plans should. Finally, the study author recommends further studies on the development of methods to identify and assist home-bound and isolated senior citizens during times of disaster or emergency.

REFERENCES

(AOA), U.S. Administration on Aging. (1995). *Disaster Preparedness Manual for the Aging Network*. Washington, D.C: U.S. Government Printing Office.

(CDC), Centers for Disease Control. (2006). CDC's Disaster Planning Goal: Protect Vulnerable Older Adults [Electronic Version]. Retrieved March 5, 2008, from http://www.cdc.gov/aging/pdf/disaster_planning_goal.pdf

ADA, Americans with Disabilities Act of 1990. (1990). [Electronic Version]. Retrieved April 24, 2008, from http://www.ada.gov/pubs/ada.htm#Anchor-Sec-63368

Aldrich, N., & Benson, W.F. (2008). Disaster preparedness and the chronic disease needs of vulnerable older adults. [Electronic Version]. *Preventing Chronic Disease*, *5*, 1-7. Retrieved February 17, 2008, from http://www.cdc.gov/pcd//issues/2008/jan/07_0135.htm.

AOA, Administration on Aging -. (2007). A Profile of Older Americans: 2007 [Electronic Version]. Retrieved March 24, 2008, from http://www.aoa.dhhs.gov/prof/Statistics/profile/2007/2007profile.pdf

AOA, U.S. Administration on Aging. (1995). *Disaster Preparedness Manual for the Aging Network*. Washington, D.C: U.S. Government Printing Office.

APHA, American Public Health Association -. (2007). 10 Essential Public Health Services. Retrieved November 12, 2007, from http://www.apha.org/programs/standards/performancestandardsprogram/resexxentialservices.htm

ARC-AAA, Atlanta Regional Commission Area Agency on Aging. (2005). Aging Resources. October 12, 2007, from http://www.atlantaregional.com/html/8_ENU_HTML.htm

ARC-AAA, Atlanta Regional Commission Area Agency on Aging -. (2007). Older Adults in the Atlanta Region: Preferences, Practices and Potential of the 55+ Population [Electronic Version]. Retrieved March 24, 2008, from http://www.atlantaregional.com/documents/AgingSurveyFinal.pdf

ARC-AAA, Atlanta Regional Commission Area Agency on Aging -. (2008). Atlanta Regional Commission Area Agency on Aging Emergency & Business Continuity Plan (Draft).

ARC-FEMA, American Red Cross and FEMA -. (2004). Preparing for Disaster for People with Disabilities and other Special Needs [Electronic Version]. Retrieved January 23, 2008, from http://www.redcross.org/images/pdfs/preparedness/A4497.pdf

ARC, American Red Cross -. (1996). Disaster Preparedness for People with Disabilities [Electronic Version]. Retrieved April 7, 2008, from http://www.redcross.org/services/disaster/beprepared/disability.pdf

Berger, Eric. (2006). Geriatrics And The IOM: Did Report Forget the Elderly? *Annals of Emergency Medicine, 48*(6), 723-725.

Blackburn, James. (1988). Chronic Health Problems of the Elderly. In C. Chilman, Nunnally, E.W., Cox, F.M. (Ed.), *Chronic Illness and Disablilty: Families in Trouble Series, Vol 2*. Newbury Park, CA: SAGE Publications, Inc. .

CCSS, Cobb County Senior Services -. (2007). Cobb Senior Services. Retrieved December 16, 2007, from http://seniors.cobbcountyga.gov/services.htm

CDC, Centers for Disease Control. (1990). Current Trends Hospitalizations for the Leading Causes of Death Among the Elderly -- United States, 1987 *MMWR, 39*(43), 777-779,785.

CDC, Centers for Disease Control. (1999). Surveillance for Morbidity and Mortality Among Older Adults -- United States, 1995-1996. *MMWR, 48(SS08)*, 7-25.

CDC, Centers for Disease Control. (2006). CDC's Disaster Planning Goal: Protect Vulnerable Older Adults [Electronic Version]. Retrieved March 5, 2008, from http://www.cdc.gov/aging/pdf/disaster_planning_goal.pdf

CDC, The Centers for Disease Control and The Merck Company Foundation. (2007). The State of Aging and Health in America 2007 [Electronic Version]. Retrieved April 7, 2008, from http://www.cdc.gov/aging/pdf/saha_2007.pdf

D.M. Bloodworth, Kevorkian, C.G., Rumbaut E., Chiou-Tan, F.Y. (2007). Impairment and Disability in the Astrodome after Hurricane Katrina: Lessons Learned About the Needs of the Disabled After Large Population Movements. *American Journal of Physical Medicine & Rehabilitation, 86*(9), 770-775.

DHR, Georgia Department of Human Resources -. (1984). Chapter 290-5-45 Disaster Preparedness Plans
Rules of the Georgia Department of Human Resources - Public Health

DHR, Georgia Department of Human Resources: Division of Public Health -. (2005). Emergency Operations Plan.

DHR, Georgia Department of Human Resources: Division of Public Health -. (2006). Counties & Districts. Retrieved March 3, 2008, from http://health.state.ga.us/regional/index.asp

DHS, United States Department of Homeland Security -. (2008). *National Response Framework (NRF)*. Retrieved January 15, 2008, from http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf

Dictionary.com. (2008). Definition of Baby Boomer. Retrieved March 26, 2008, from http://dictionary.reference.com/browse/baby%20boomer

Eldar, Rueben. (1992). The Needs of Elderly Persons in Natural Disasters: Observations and Recommendations. *Disasters, 16*(4), 355-358.

FEMA, Federal Emergency Management Agency. (2007). Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended, and Related Authorities [Electronic Version]. *FEMA 592*. Retrieved January 15, 2008, from http://www.fema.gov/pdf/about/stafford_act.pdf

FEMA, Federal Emergency Management Agency :Emergency Management Institute -. (1997). *Disaster Related Needs of Seniors and Persons with Disabilities - Instructor Guide*.

Fernandez, Lauren S., Byard, D., Lin C.C., Benson,S., Barbera, J. A. (2002). Frail Elderly as Disaster Victims: Emergency Management Strategies. *Prehospital and Disaster Medicine, 17*(2), 67-74.

FIFARS, Federal Interagency Forum on Aging-Related Statistics -. (May 2006). *Older Americans Update 2006 : Key Indicators of Wellness*. Washington, D.C. : Government Printing Office.

Ford, Earl S., & Mokdad, A.H., Michael W. Link, William S. Garvin, Lisa C. McGuire. (2006). Chronic Disease in Health Emergencies:In the Eye of the Hurricane [Electronic Version]. *Prev Chronic Dis*. Retrieved November 11, 2007, from http://www.cdc.gov/PCD/issues/2006/apr/pdf/05_0235.pdf

GA.gov, Georgia.gov -. (2008). Regions, Counties & Cities. Retrieved March 3, 2008, from http://www.georgia.gov/00/channel_title/0,2094,4802_4977,00.html

GCBC, Gwinnett County Board of Commissioners -. (2007). Gwinnett Senior Services. Retrieved December 12, 2007, from http://www.gwinnettcounty.com/cgi-bin/gwincty/egov/ep/gcbrowse.do?channelId=-536881902&channelPage=%2Fep%2Fchannel%2Fdefault.jsp&pageTypeId=536880236

GDCA, Georgia Department of Community Affairs -. (2006). County Snapshots: State of Georgia. Retrieved March 24, 2008, from http://www.dca.state.ga.us/CountySnapshotsNet/stateSnapshot.aspx?stype=2

Gebbie, K. M., & Valas, J., Merrill, J., Morse, S. (2006). Role of Excercises and Drills in the Evaluation of Public Health in Emergency Response. *Prehospital and Disaster Medicine, 21*(3), 173-182.

GEMA, Georgia Emergency Management Agency -. (2008). *Georgia Emergency Operations Plan*. from http://www.gema.ga.gov/ohsgemaweb.nsf/f603a9eba2b0c5f185257114005f478e/30c5ce607328558f8525720900627e3a/$FILE/GEOP%20Updated%20January%202008.pdf

Gibson, Mary Jo, & Hayunga, Michele. (2006). We Can Do Better: Lessons Learned for Protecting Older Persons in Disasters [Electronic Version]. *AARP*. Retrieved October 17, 2007, from http://assets.aarp.org/rgcenter/il/better.pdf

Haddow, George D., & Bullock, J.A. (2006). *Introduction to Emergency Management* (Second ed.). New York, NY: Elsevier, Inc.

HCBC, Henry County Board of Commissioners -. (2007, December 16, 2007). Senior Services. from http://www.co.henry.ga.us/SeniorServices/SeniorServicesMain.htm

Hobbs, Daryl. (1987). Strategy for Needs Assessments. In D. E. Johnson, Meiller, L.R., Clancy Miller, L., Summers, G.F. (Ed.), *Needs Assessment: Theory and Methods*. Ames, Iowa: Iowa State University Press.

Hooke, William H., & Rogers, Paul G. (Eds.). (2005). *Public Health Risks of Disasters*. Washington, D.C.: The National Academies Press.

IFAS, Institute of Food and Agricultural Sciences -. (1999). Disaster Planning for Elderly and Disabled Populations [Electronic Version]. Retrieved February 9, 2008, from http://disaster.ifas.ufl.edu/pdfs/chap02/d02-09.pdf

IOM, Institute of Medicine. (1988). *The Future of Public Health*. Washington, DC: National Academy Press.

KFF, The Washington Post/Kaiser Family Foundation/Harvard University -. (2005). Survey of Hurricane Katrina Evacuees. [Electronic Version]. *Publication #7401*. Retrieved April 7, 2008., from http://www.kff.org/newsmedia/upload/7401.pdf

Kilijanek, Thomas S., & Drabek, Thomas E. (1979). Assessing Long Term Impacts of a Natural Disaster: A Focus on the Elderly. *Gerontologist, 19*(6), 555-566.

Lamb, Karen V., & O'Brian, C., Frenza, P. (2008). Elders at Risk During Disasters. *Home Healthcare Nurse, 26*(1), 30-38.

Langer, Nieli. (2004). Natural Disasters That Reveal Cracks In Our Social Foundation. *Educational Gerontology, 30*(4), 275-285.

Lunsford, Dan. (2000). The Triad Alliance: Preparing Vulnerable Populations. *Public Management, 82*(10), 17-19.

McGuire, Lisa C., & Ford, E.S, Okoro, C.A. (2007). Natural Disasters and Older U.S. Adults with Disabilties: Implications for Evacuation. *Disasters, 31*(1), 49-56.

Mokdad, Ali H., & Mensah, G.A., Posner, S.F., Reed, E., Simoes, E.J., Engelgau, M.M. (2005). When Chronic Conditions Become Acute: Prevention and Control of Chronic Diseases and Adverse Health Outcomes During Natural Disasters [Electronic Version]. *Preventing Chronic Disease*, *2*, 1-4. Retrieved February 20, 2008, from http://www.cdc.gov/pcd/issues/2005/nov/05_0201.htm

NCD, The National Council on Disability -. (2005). Saving Lives: Including People with Disabilities [Electronic Version]. Retrieved August 29, 2007, from http://www.ncd.gov/newsroom/publications/2005/saving_lives.htm

Noji, Eric K. (1997). The Nature of Disaster: General Characteristics and Public Health Effects. In E. K. Noji (Ed.), *The Public Health Consequences of Disasters*. Oxford, NY: Oxford University Press.

Novick, Lloyd F., & Mays, G.P, Morrow, C.B. (Eds.). (2008). *Public Health Administration: Priniciples for Population-Based Management* (Second ed.). Gaithersburg, MD: Aspen Publishers, Inc.

OAA, Older Americans Act of 1965 -. (1965). Title 42, Chapter 35, Subchapter 1, Sec. 3001.

.

Pampel, Fred C. (1998). *Aging, Social Inequality and Public Policy*. Thousand Oaks, CA: Pine Forge Press.

Penner, Susan J., & Wachsmuth, Christine. (2008). Disaster Management and Populations with Special Needs. In J. Pinokowski (Ed.), *Disaster Management Handbook*. Boca Raton, FL: CRC Press.

Peterson, Donna J., & Alexander, Greg R. (2001). *Needs Assessment in Public Health: A Practical Guide for Students and Professionals.* . New York, NY: Kluwer Academic/ Plenum Publishers.

PHLS, Public Health Leadership Society -. (2002). Principles of the Ethical Practice of Public Health [Electronic Version]. Retrieved November 12, 2007, from http://www.apha.org/NR/rdonlyres/1CED3CEA-287E-4185-9CBD-BD405FC60856/0/ethicsbrochure.pdf

PMR, Prince Market Research -, & Clarity. (2007). Attitudes of Senior Citzens and Baby Boomers on Aging in Place [Electronic Version]. Retrieved March 24, 2008, from http://www.clarityproducts.com/research/Clarity_Aging_in_Place_2007.pdf

RA, Ready America -. (2007a). Older Americans [Electronic Version]. Retrieved March 2, 2008, from http://www.ready.gov/america/getakit/seniors.html

RA, Ready America -. (2007b). People with Disabilities and Other Special Needs [Electronic Version]. Retrieved March 2, 2008, from http://www.ready.gov/america/getakit/disabled.html

Reviere, Rebecca, Berkowitz, S., Carter, C.C., Graves Furguson, C. (1996). Needs Assessment: A Creative and Practical Guide for Social Scientists. In. Washington, D.C.: Taylor and Francis.

SEMA, State of Missouri Emergency Management Agency -. (2007). Evacuation Considerations for Persons who are Elderly, Disabled or Have Special Medical Care Issues [Electronic Version]. Retrieved November 13, 2007, from http://sema.dps.mo.gov/elderlyevac.htm

Shoaf, Kimberly I., & Rottman, S.J. (2000). The Role of Public Health in Disaster Preparedness, Mitigation, Response and Recovery. *Prehospital and Disaster Medicine, 15*(4), 18-20.

Townsend, Frances F. (2006). *The Federal Response to Hurricane Katrina: Lessons Learned*. Retrieved February 2, 2008, from http://www.whitehouse.gov/reports/katrina-lessons-learned.pdf

USCB, U.S. Census Bureau -. (2008a). Geographic Comparison Table: United States - States and Puerto Rico. Retrieved March 24, 2008, from http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=&-ds_name=DEC_2000_SF1_U&-_lang=en&-mt_name=DEC_2000_SF1_U_GCTPH1R_US9S&-format=US-9|US-9S&-CONTEXT=gct

USCB, U.S. Census Bureau -. (2008b). IDB Population Pyramid Year Selection. Retrieved January 14, 2008, from http://www.census.gov/cgi-bin/ipc/idbpyrs.pl?cty=US&out=y&ymax=250&submit=Submit+Query

USCB, U.S. Census Bureau -. (2008c). State and County QuickFacts. Retrieved January 14, 2008, from http://quickfacts.census.gov/qfd/states/13000.html

Vest, J. R., & Valadez, A.M. (2006). Health Conditions and Risk Factors of Sheltered Persons Displaced by Hurricane Katrina. *Prehospital and Disaster Medicine, 21*(2), 55-58.

Waterstone, Michael E., & Stein, Micheal A. (2006). Emergency Preparedness and Disability. *Mental and Physical Law Reporter, 30*(3), 338 - 339.

Waugh, William L., Jr. (2000). *Living with Hazards, Dealing with Disasters: an Introduction to Emergency Management*. Armonk, N.Y. : M.E. Sharpe.

APPENDICES

Appendix A

List of Agencies Contacted for Participation in Research.

State Agencies:

Georgia Emergency Management Agency (GEMA)

Georgia Department of Human Resources -Division of Public Health: Office of Emergency Preparedness

Georgia Department of Human Resources - Department of Family and Children Services (DFCS)

Georgia Department of Human Resources - Division of Aging Services

Georgia Department of Human Resources – Office of Regulatory Services

(Long –Term Care)

Local Agencies:

Emergency Management Agency (EMA)/ Homeland Security

(Atlanta-Fulton, Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Gwinnett, Henry, and Rockdale counties)

Georgia Division of Public Health - Emergency Coordinators

(District 1-2/Cherokee, District 3-1/Cobb/Douglas, District 3-2/ Fulton, District 3-3/Clayton, District 3-4/Gwinnett/Rockdale, District 3-5/DeKalb, and District 4/Fayette/Henry)

Atlanta Regional Commission – Area Agency on Aging

County Senior Services Agencies

(Atlanta-Fulton, Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Gwinnett, Henry, and Rockdale counties)

Department of Family and Children Services

(Cherokee County, Clayton County, Cobb County, Douglas County, Fayette County, Fulton County,

Gwinnett County, Rockdale County)

Sheriff's Offices

(Cherokee County, Rockdale County)

County Board of Commissioners

(Douglas County)

County Board of Education

(Clayton County, Cobb County, Rockdale County)

Non-Governmental Organizations:

American Red Cross

Salvation Army

United Way

Appendix B

Emergency Relief Services Questionnaire

Emergency Relief Services Questionnaire

Title:

_____

Date:

_____

Agency/Organization:_____

_

1) How does your agency/organization characterize your target population during a disaster or other emergency situation? Briefly list their common emergency relief needs.

   _____

   _____

   _____

   _____

   _____

   _____

2) Please read the list of emergency relief services and descriptions of services below. Select the emergency relief services your agency/organization directly provides to your target population. If your agency/organization provides

services in conjunction with another agency/organization, please indicate in comments section.

Emergency Relief Services	Description of services	Yes	No	Comments
I) Clothing	This category includes: shirts, pants, skirts, shoes, socks, undergarments and coats/jackets.			
II) Food and Beverages	This category includes: Standard meals, meals for seniors with special dietary requirements and all beverages.			
III) Personal Care Items (standard and senior citizens specific)	This category includes: soap, lotion, deodorant, sanitary products like depends, long handle brushes and combs, etc.			

IV) Medication /Medical Supplies	This category includes: required daily medications, diabetes testing materials, etc. **Please specify services in comments.			
V) Dialysis/ Dialysis Equipment	This category includes: Dialysis services and equipment or transportation to dialysis clinic.			
VI) Emergency Medical Services	This category includes: out of hospital acute care for illnesses and injuries believed to pose an immediate threat to life or health.			
Emergency Relief Services	**Description of service**	**Yes**	**No**	**Comments**
VII) Eyeglasses/ Contacts	This category includes: Eyeglasses, contacts, and other items used to improve vision.			
VIII) Durable Medical Equipment	This category includes: Oxygen tanks, hospital beds, walkers, etc. **Please specify services in comments.			
IX) Wheelchair and Wheelchair Batteries	This category includes: Electric powered, manual wheelchairs and wheelchair batteries.			
X) Services for the Deaf or Hard of Hearing	This category includes: Hearing aids, hearing aid batteries, TTY telephones, sign language interpreters, etc.			

XI) Information Services	This category includes: Information from agency to senior citizen about 'in-house' services and information about other agency/organization sponsored services.			
XII) Language Interpretation/Translation Services	This category includes: language interpreters, brochures/ handouts in commonly spoken languages, etc.			
Emergency Relief Services	**Description of service**	**Yes**	**No**	**Comments**
XIII) Emergency Shelter/ Special needs and Handicap accessible	This category includes: a building or other structure which providing equal access shelter for people who are unable to return to their primary place of residence in the event of an emergency			
XIV) Transportation Services	This category includes: Transportation from agency service location to home or other necessary location.			
XV) Nursing Home Placement Services	This category includes: all programs and procedures involving the assignment of displaced individuals with significant deficiencies in the ability to perform activities of daily living in nursing			

		home facilities.			
XVI)	Mental Health Services	This category includes: various crisis counseling services following a disaster or other emergency.			
XVII)	Electronic Medical Records /Medical Records Accessibility	This category includes: all systems in place to access patient medical records digitally, by phone, fax, email or other methods in accordance with HIPAA regulations.			

3) During an emergency or disaster situation, many agencies only provide a specific subset of all potentially required emergency relief services to their target population. There are also times when the needs of the target population far exceed what an agency/organization can provide. These situations leave 'gaps' between the services your agency/organization provides and the actual needs of your target population. Please briefly outline any formal partnerships, collaborations or aid agreements your agency/organization has with other agencies/organizations in order to help fill this gap in services.

_____

_____

_____

_____

_____

_____

Appendix C

List of agencies and organizations which provided EOPs, SOPs, disaster plans or other appropriate documents

The following agencies provided copies of EOPs, SOPs or relevant ESF and relevant documentation:

Atlanta-Fulton County EMA

Cherokee County EMA

Clayton County EMA

Cobb County EMA

Douglas County EMA

Fayette County EMA

Gwinnett County EMA

Rockdale County EMA

North Georgia Health District (1-2)

Cobb/Douglas Health District (3-1)

Fulton Health District (3-2)

East Metro Health District (3-4)

DeKalb Health District (3-5),

LaGrange Health District (4)

Department of Human Resources – Division of Public Health

Department of Human Resources – Division of Family and Children Services

Cobb County Department of Family and Children Services

Atlanta Regional Commission (ARC) Area Agency on Aging

County Senior Service Agencies

Clayton County

Cobb County

DeKalb County

Douglas County

Fayette County

Gwinnett County

Rockdale County

Long Term Care Facilities Provided by The Georgia Department of Human Resources

Office of Regulatory Services

A.G. Rhodes Home
350 Boulevard SE
Atlanta, GA 30312

Arrowhead Healthcare Center
239 Arrowhead Blvd
Jonesboro, GA 30236

Austell Healthcare
1700 Mulkey Rd
Austell, GA 30106

The Brian Center for Health and Rehabilitation of Canton
150 Hospital Cir
Canton, GA 30114

Canton Nursing Center
321 Hospital Rd
Canton, GA 30114

Cornerstone Health & Rehab Center
P.O. Box 76
McDonough, GA 30253

Delmar Gardens of Gwinnett
3100 Club Dr
Lawrenceville, GA 30044

Douglasville Nursing & Rehab
4028 Highway 5
Douglasville, GA 30135

Fairburn Health Care Center
178 W. Campbellton St
Fairburn, GA 30213

Golden Living Center Decatur
2787 N. Decatur Rd
Decatur, GA 30033

Medical Arts Health Facility of Lawrenceville
P.O. Box 690
Lawrenceville, GA 30046

Rockdale Healthcare Center
1510 Renaissance Dr Ne
Conyers, GA 30012

Shoreham Postacute Recovery Center
811 Kennesaw Ave
Marietta, GA 30060

Southland Nursing Home
P.O. Box 2747
Peachtree City, GA 30269

Traditions Health & Rehab
2816 Evans Mill Rd
Lithonia, GA 30058

Westbury Health & Rehab Center
1428 Milstead Rd
Conyers, GA 30012

Appendix D

Emergency Relief Services Questionnaire Results

1) *How does your agency/organization characterize your target population during a disaster or other emergency situation? Briefly list their common emergency relief needs.*

- Primarily 60+ but all citizens become the target population during an emergency event. Transportation, prescription assistance/administration, pet care are the most common relief needs.

- Our urban county has a very diverse population of 680,000+
  Our population includes those who are directly affected and those who are supporting the needs of those affected. Life Safety and support including rescue, evacuation, shelter in place, shelter, etc.

- Public Health has primary responsibility for Emergency Support Function #8_Health and Medical. Health need of the public vary widely dependant upon the nature of the emergency. We plan in an all hazards approach and prepare to deal with all segments of the population during specific

emergency situations. We plan for dispensing medications and/ or vaccines, medical supplies, coordinating health care and medical services during an emergency situation.

- Services are provide to seniors 60 years or older and their caregivers residing in ####[1] county. Assistance available consist of emergency financial assistance, in home services, information and referral services, medical transportation, senior center transportation, and etc.

- #### is tasked with Mass Care along with the American Red Cross so our target population are those requiring shelter.

- All citizens within ### County at time of disaster (residents, visitors, commuters, etc.) and public safety officials.

- General population/special needs - special needs are, for purposes of public health, those who have medical needs that require medical care that cannot be addressed in a general population environment. This would not include those such as diabetics who can care for themselves or dialysis patients who would transport for routine care. Medical services required would be coordinated with community partners.

- Our elderly population is frail and very vulnerable during crisis situations. They require food/water, financial assistance, RX assistance, clothing and shelter, transportation, medical attention, flashlights, batteries and toiletries.

- Relief needs: medications, transportation, food, shelter

- #### is charged with the responsibility from #### to set up Emergency Shelters until the Red Cross is able to assume the shelter duties. At which point we will support their efforts. We would also support the efforts of Public Health to open a Special Needs shelter if necessary.

2) Please read the list of emergency relief services and descriptions of services below. Select the emergency relief services your agency/organization directly provides to your target population. If your agency/organization provides services in conjunction with another agency/organization, please indicate in comments section.

I) Clothing: This category includes: shirts, pants, skirts, shoes, socks, undergarments and coats/jackets.

Yes	No	No Response
1	8	1

[1] The symbol #### is being used as a method of maintaining liaison and agency anonymity,

- #### is tasked with Mass Care along with the American Red Cross so our target population are those requiring shelter.
- Our county has a local Volunteer Organizations Assisting in Disaster (VOAD) which is made up of almost 300 volunteer groups. They are the primary entity responsible for this task.
- The ##### uses a statewide database maintained by the Atlanta Regional Commission Thrift stores are listed in this database as a referral to seniors. The Kinship Care Program a part of #### has a small clothes Closet available to its clients which are Grandparents raising Grandchildren.
    - We would direct them to M.U.S.T. ministries, Salvation Army, or St. Vincent de Paul Society if we did not have any (donated) clothing available.

II) Food and Beverages: This category includes: Standard meals, meals for seniors with special dietary requirements and all beverages.

Yes	No	No Response
7	3	n/a

- #### does not provide direct services but operates through a network of providers that do and assist seniors secure these type things during an emergency event.
- ######, we coordinate all activities within #####, this includes Senior Services which provides food services, the school system and sheriff's office, as well as private vendors that support food services.
- Red Cross, Salvation Army, and other non-governmental agencies also provide food services.
- The lunch time meals is a home delivered meal service available through ##### for clients assessed for their level of need and evaluated by staff. An emergency shelf stable five day meal is also provided and monitored for replacement for these clients. Meals are prepared at the determination of the assessment by case management. For example, diabetic meals, low sodium and Ensure is available for clients that require these specific dietary service.
- With American Red Cross
- To public safety personnel.
- We provide Meals on Wheels, we have a small pantry and have local food pantries to direct those we are unable to serve.

III) Personal Care Items (standard and senior citizens specific): This category includes: soap, lotion, deodorant, sanitary products like depends, long handle brushes and combs, etc.

Yes	No	No Response
5	4	1

- #### does not provide direct services but operates through a network of providers that do and assist seniors secure these type things during an emergency event.
- Again, we do not provide these resources from our agency but rather coordinate the needs from the incident commander or other manager and then seek assistance from volunteer groups. Senior Services would be a primary partner to support this endeavor.
- The ##### is a member of the Gifts In Kind Program which charges a membership fee for service. Providing partnerships with company such as Bed Bath and Beyond.
- We have a small supple of these. We would direct them to local ministries and churches.

IV) Medication/Medical Supplies: This category includes required daily medications, diabetes testing materials, etc.

Yes	No	No Response
4	5	1

- ### does not provide direct services but operates through a network of providers that do and assist seniors secure these type things during an emergency event.
- This support is provided through our Public Health Division.
- We would work with all local and State agencies to coordinate the obtaining of medical supplies and medications needed during an emergency from supplies, hospitals, pharmacies and others
- ##### has a small budgeted amount set aside to assist seniors for emergency need for diabetic testing supplies, diaper, etc. Other community organizations assist with this service and seniors are referred to them first.
- While public health does not provide materials, through assistance services, scripts might be provided to obtain the needed medications if no scripts were available through collaborations with area physicians in help centers that might be established as during Katrina.

- We would direct them to the American Red Cross or a Local Hospital

V) Dialysis/ Dialysis Equipment: This category includes: Dialysis services and equipment or transportation to dialysis clinic.

Yes	No	No Response
2	7	1

- But during an emergency event the network of providers that my agency contracts with is available to assist seniors secure these type things.
- We might support this service with county vehicles if necessary. Most likely transportation would be provided through volunteer organizations or if necessary, local medical transport, such as the private ambulance services.
- PH would work with local and State resources to coordinate the delivery of dialysis services. We do not own any such equipment.
- #### register clients for transportation to Medical Appointments and also Dialysis appointments.
- Refer to local dialysis center

VI) Emergency Medical Services: This category includes: out of hospital acute care for illnesses and injuries believed to pose an immediate threat to life or health

Yes	No	No Response
2	7	1

- during an emergency event the network of providers that my agency contracts with is available to assist seniors secure these type things.
- Ambulance services
- PH does not provide Emergency Medical care...we would provide basic triage, assessment and stabilization in mass casualty events in collaboration with other health care providers.
- Demand Response services are available to clients the ###. Also, community services are available through statewide Enhanced Services Program Database.
- Public health would coordinate with the local emergency management agency the opening of a

Neighborhood Emergency Help Center to provide triage and other support. These are normally staffed by volunteer doctors and nurses as well as public health nurses functioning within their scopes of practice. Vaccinations indicated by the type of disaster would be provided.

- We would refer them to the local health department or local hospital.

VII) Eyeglasses/ Contacts: This category includes: Eyeglasses, contacts, and other items used to improve vision.

Yes	No	No Response
1	8	1

- During an emergency event the network of providers that my agency contracts with is available to assist seniors secure these type things.
- We are presently establishing a volunteer Medical Reserve Corps made up of doctors from various fields. We would refer to them for support.
- #### have community services available in the statewide Enhanced Services Program Database.
- We would direct them to the Lions House Foundation or Low Vision in Atlanta..

VIII) Durable Medical Equipment: This category includes: Oxygen tanks, hospital beds, walkers, etc

Yes	No	No Response
4	5	1

- During an emergency event the network of providers that my agency contracts with is available to assist seniors secure these type things.
- Public health and medical partners
- PH would collborate with Regional Coordinating hospitals and EMA to locate required equipment
- ##### provide clients with referrals the providers that assist with durable medical equipment available in the statewide Enhanced Services Program Database.
- We do keep some of these (donations) on hand, however, if we did not have a certain item we would direct them to “Friends of Disabled Adults or a local medical equipment business.

- Limited access to walkers.

IX) Wheelchairs and Wheelchair Batteries: This category includes: Electric powered, manual wheelchairs and wheelchair batteries.

Yes	No	No Response
4	5	1

- During an emergency event the network of providers that my agency contracts with is available to assist seniors secure these type things.
- Public health and medical partners
- We would assist in coordinating with EMA and Regional coordinating hospitals to locate this equipment.
- Services providers in the statewide Enhanced Services Program database may assist with either the purchase or gently used equipment such as wheelchairs. Batteries for wheelchairs may be purchased through an Medical Equipment company. Dependent on the age of the wheelchair this may be covered by Medicare if the wheelchair has a shorter lifespan the senior or caregiver maybe required to pay for the cost of a replacement battery in full.
- We do carry some manual donated W/C's, same as VIII (above)
- limited access

X) Services for the Deaf or Hard of hearing: This category includes: Hearing aids, hearing aid batteries, TTY telephones, sign language interpreters, etc.

Yes	No	No Response
4	4	2

- During an emergency event the network of providers that my agency contracts with is available to assist seniors secure these type things.
- We would seek our public health and the non-governmental organizations that support the deaf and hard of hearing such as the GA Council for Haring Impaired
- PH does provide sign interpreters at dispensing and/or triage sites opened by PH
- Services are available as a referral through the ESP (Enhanced Services Program) database.
- We may be asked to locate these services, but do not provide them directly.
- Sign language interpreters would be used in a clinical setting, if needed, as part of the Neighborhood Emergency Help Center staff. No supplies are available.
- We would direct them to the Lion's House Foundations.

XI) Information Services: This category includes: Information from agency to senior citizen about 'in-house' services and information about other agency/organization sponsored services.

Yes	No	No Response
9	1	n/a

- ### has a Communication's Department which would provide information to all citizens, including senior citizens by TV, radio, newspaper, email, etc. We would also partner with Senior Services and other non-governmental orgs to support communications.
- PH provides information to all segments of the population in health emergencies and work with EMA during such events
- ##### completes an assessment for seniors 60 yrs. old hold to determine their eligibility and the level of need. These services include: Home Delivered Meals, Homemaker Services, Homemaker Services, Personal Care, Respite Services to assist the seniors Caregiver. Other services are also listed in the ESP Database and available to the senior.
- With American Red Cross
- Discuss service options available and provide information about the services.

XII) Language Interpretations/ Translation Services: This category includes: language interpreters, brochures/ handouts in commonly spoken languages, etc.

Yes	No	No Response
7	3	n/a

- We already offer our handouts in multiple languages. Most other emergency information from FEMA is also available in multiple languages. Lists of interpreters are on file to contact during a crisis.
- All emergency PH information is available in both English and Spanish
- Clayton County Aging services as the capabilities of the Language Line through AT&T/BellSouth.
-
- Roster of #### approved Interpreters and Translators
- We do carry a minimal of a few brochures in Spanish. No on site Translator available We would refer them to ace services that how translators in several different languages. We also have access to the language line at ARC..

XIII) Emergency Shelter/ Special Needs and Handicap Accessible: This category includes: a building or other structure which providing equal access shelter for people who are unable to return to their primary place of residence in the event of an emergency.

Yes	No	No Response
7	3	n/a

- During an emergency event the network of providers that my agency contracts with is available to assist seniors to find shelters.
- #### only supports Red Cross operated congregate shelters; however, our county offers the facility, the security, and other resources. Public Health is the primary agency responsible for a special needs shelter. However, again, the county would provide resources for support.
- PH supports congregate shelters when requested by EMA and Red Cross with nursing staff. We would support special needs populations when necessary
- These are services available through the ESP Database that #### has access to.
- Congregate with American Red Cross; Special Needs with DHR Division of Public Health. Both types must be Handicap accessible.
- We help coordinate general population shelters.
- Public health has a support role with DFACS having the lead in shelter support. All shelters are supposed to be handicap accessible. Medical special needs are addressed above. The priority is to use existing services such as nursing homes, before opening special needs shelters due to qualified staffing

issues. Staff must be trained to address the particular needs of the individuals being cared for.

- We do not have a shelter but would be responsible for opening shelters that have been predesignated with the Red Cross.

XIV) Transportation Services: This category includes: Transportation from agency service location to home or other necessary location.

Yes	No	No Response
5	3	2

- In a limited capacity.
- In a crisis, the county might be responsible for transportation; this includes but is not limited to ### Transit Authority
- Transportation services are available to seniors attending the Adult Day Health Program, Community Senior Centers
- We do have a county wide bus service available and several of the buses have wheelchair lift.
- limited

XV) Nursing Home Placement Services: This category includes: all programs and procedures involving the assignment of displaced individuals with significant deficiencies in the ability to perform activities of daily living in nursing home facilities.

Yes	No	No Response
2	7	1

- Public Health
- The ESP statewide database consist of resources for Nursing Home Placement and provided to callers requesting this type of service.
-
- This is a coordination effort in which public health would be involved.
- I would direct them to assisted senior placement services, American Red Cross, or the Admissions Director for a local nursing home.

XVI) Mental Health Services: This category includes: various crisis counseling services following a disaster or other emergency.

Yes	No	No Response
1	8	1

- Public Health is also the primary agency responsible for mental health services. Red Cross and other volunteers might also support.
- Case Managers and Specialist assist clients with crisis counseling and other emergency services. We are also Mandated Reporters so if services are needed to Adult Abuse the caller is informed at that time. In the ESP database services available to caller as it relates to a crisis.
- Mental health services is a separate division in Georgia under the Department of Human Resources. #### is another division within DHR.
- I would direct them to local counseling agencies or Chaplin, possibly with local police departments who have crisis experience.

XVII) Electronic Medical Records/ Medical Records Accessibility: This category includes: all systems in place to access patient medical records digitally, by phone, fax, email or other methods in accordance with HIPAA regulations.

Yes	No	No Response
3	6	1

- Unless approval has been provided to access these records, the answer is no. Public Health and Medical Service providers would be primarily responsible.
- I am unclear about the question.
- Medical Records are not assessable to this office due to HIPAA regulations. However, the Adult Day Health Program has access to the necessary health information of clients in attendance of this program.
- There are limitations, as in Katrina when medical records were totally destroyed. Some people arrived with their records, but many did not and had to have prescriptions rewritten without much history. Individuals must take responsibility for keeping current information along with their identification.

3) During an emergency or disaster situation, many agencies only provide a specific subset of all potentially required emergency relief services to their target population.

There are also times when the needs of the target population far exceed what an agency/organization can provide. These situations leave 'gaps' between the services your agency/organization provides and the actual needs of your target population. Please briefly outline any formal partnerships, collaborations or aid agreements your agency/organization has with other agencies/organizations in order to help fill this gap in services.

Question 22: During an emergency or disaster situation, many agencies only provide a specific subset of all potentially required emergency relief services to their target population. There are also times when the needs of the target population far exceed what an agency/organization can provide. These situations leave 'gaps' between the services your agency/organization provides and the actual needs of your target population. Please briefly outline any formal partnerships, collaborations or aid agreements your agency/organization has with other agencies/organizations in order to help fill this gap in services.

- #### partners with GEMA during emergency events and enlists sub-DHR agencies to assist in operations on an as needed basis.

- Emergency management is dependent upon partnerships. Some of our agreements with other agencies/organizations are outlined in our local emergency operation's plan and the statewide mutual aid agreement. Cobb's EMA is only a coordinator of functions and services. We have partnered with multiple disciplines and multiple jurisdictions at all levels of government as well as non-governmental organizations and private businesses. There are too many to name. We have work very hard in our county to prepare, but we have a long way to go. It's important that residents do not rely on the government but rather are educated to protect themselves and their family. Our goal is to educate those who can help themselves in a crisis so that we can provide services to those who can't.

- PH has partnered with EMA and over 30 agencies that provide services to Populations at Risk in an emergency. A registry has been created for these populations and agencies to self register. Keeping such a registry current when people die or move is a very difficult problem

- ##### has partnerships with community organizations. ##### is part of ### County Government and the needs of our seniors closely monitored in order to avoid gaps in service. If a anytime a situation occurs and funds or services are not available the senior is placed on a waiting list until the resources are available to provide this service. A request to the county for additional funds will assist in this request.

- In the case of public health, it is the lead for ESF 8 Public Health and Medical Services, and support of ESF 6 Mass Care Housing and Human Services. The local Emergency Management Agency has access to all appropriate Emergency Support Functions that respond to a given emergency. Partnerships are maintained with many agencies that support various of the formal ESFs. There are also partnerships with neighboring health districts for support. It is also through the local EMA that state and federal assistance would be obtained to fill the gaps.

- FFEMA, Health Department, local hospital, EMS, police department, home health agencies, VA, MUST Ministries and other care providers.

- While there was no category that specifically addressed this, #### has/would set up to make emergency determinations of eligibility for Food Stamps, TANF, and Medicaid. We have taken applications at our

office as well as in Emergency Centers and Emergency Shelters. During Katrina, our office became a central place for evacuees to make initial contact with resources. As such, in that extreme situation, we not only provided emergency benefits for FS, TANF and Medicaid, we coordinated with other organizations to provide immediate needs. We served several meals over the first few days of the crisis that were donated by churches, restaurants, and other charities. We gave out donated clothes, toiletries, groceries, bottled water, diapers, school supplies etc. We also provided computers with internet connection for people who were trying to connect family and friends where they had lost contact during the evacuation. We had interpreters who work for us volunteer their time and services. Mental Health workers came and worked among the people waiting for services. We had pharmacies that assisted us with specific medical needs where there were immediate concerns. We connected pet owners with shelter for their pets. As time went on more and more agencies assumed these responsibilities but initially we served thousands of people through our staff, individual volunteers, church, social, and civic organizations and the businesses of Cobb County. This community really stepped up to meet the needs of people during this crisis. Katrina was exceptional but we managed a variety of things that ordinarily wouldn't fall within our realm. We also worked with the emergency shelters that were established by the Red Cross. We did not have formal agreements but staff simply began to draw on the connections we have on an ongoing basis as well as their personal connections and by reaching out to the business community to help during this time. Many people recognized the crisis and simply showed up ready to help.

Appendix E

Georgia Emergency Operations Plan

EMERGENCY SUPPORT FUNCTION ANNEX 6
MASS CARE, HOUSING, AND HUMAN SERVICES

Primary Agency
Department of Human Resources (DHR)

Principal Voluntary Agency
American Red Cross

Support Agencies

AGENCY	RESOURCE
Board of Regents of the University System of Georgia	Facilities, Personnel
Department of Administrative Services	Procurement
Department of Community Affairs	Emergency Funding, Inventory and Site Preparation, Loan Consultation, Temporary Housing Coordination
Department of Corrections Equipment	Personnel, Vehicles
Department of Defense	Emergency Food, Equipment, Facilities, First Aid, Personnel
Department of Education	Facilities
Department of Natural Resources	Health and Sanitation Consultation, Personnel, Water Quality Control
Department of Public Safety	Security
Department of Technical and Adult Education	Facilities, Personnel
Department of Transportation Equipment	Personnel, Vehicles
Department of Veterans Services	Facilities, Personnel
Georgia Baptist Convention	Food, Personnel, Child Care,
Georgia Building Authority	Food
Georgia Forestry Commission	Equipment Supplies, Vehicles
Georgia Public Safety Training Center	Storage Facilities
Office of Planning and Budget	Procurement, Funding
Prosecuting Attorney's Council of Georgia	Personnel, Technical Assistance
The Salvation Army	Donated Goods, Food

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan (NRP) ESF 6 (Mass Care, Housing, and Human Services). Mass care encompasses: sheltering, feeding, first aid at designated sites, and Disaster Welfare Inquiry (DWI) to

reunite families or inform family members outside the disaster area. The Department of Human Resources (DHR) has primary state agency responsibility for this function. The American Red Cross (ARC) is the principal voluntary organization to support this plan.

B. Scope

The scope of this ESF is to provide a coordinated approach for collection, analysis and dissemination of information in order to facilitate the overall provision of services and resources during an emergency or disaster. This includes a coordinated effort to provide mass care services such as shelter, food and first aid.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to fulfill the responsibilities of the agency. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. In a Presidential Declaration, FEMA will provide information and planning support to the state.
2. FEMA will collect, analyze and disseminate information from respective federal agencies with ESF responsibilities.
3. The General Service Administration (GSA) will provide federal government support for procurement activities. Procurement will be made in accordance with federal laws and regulations.
4. Federal laws and regulations authorize emergency purchasing under any "situation of unusual and compelling urgency." All procurement actions made at the request of federal agencies in support of the plan will be in accordance with GSA statutory and administrative requirements and accomplished using appropriate Federal Emergency Management Agency (FEMA) fund citation/reimbursement procedures.
5. Federal assistance for evacuation is available from the United States Department of Energy (DOE), Department of Defense (DOD), United States Coast Guard, Department of Health and Human Services (HHS) - United States Public Health Service (USPHS) and Nuclear Regulatory Commission (NRC) through coordination with the Federal Emergency Management Agency.
6. FEMA - Public and Intergovernmental Affairs is responsible for initiating actions required to implement federal activities in response operations.
7. FEMA may provide representatives to accompany State Damage Assessment Teams.
8. The American Red Cross (ARC) Vice President of Operations, National Headquarters, will direct the activities of the National Mass Care (ESF 6) and

represent ARC on the Catastrophic Disaster Response Group (CDRG) at FEMA.
9. The Governor may request federal Individual and Households Program funding to assist individuals and families who, as a result of a major disaster, are unable to meet necessary or serious needs. GEMA/FEMA provide administrative oversight for this program, with staff from DHR. In a disaster, federal agencies are authorized through a Presidential Declaration to provide state and local governments with equipment, facilities, personnel and supplies essential for emergency assistance to disaster victims.
10. Provide financial assistance to state or local agencies for services or training of disaster workers and issue such rules and regulations as may be necessary to effectuate this delegation.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.
All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number.
GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Mass Care

1. Strategy

a. Department of Human Resources (DHR) and American Red Cross (ARC) will coordinate with appropriate agencies and organizations to ensure operational readiness. DHR and ARC will develop and maintain Standard Operating Procedures (SOPs).
b. ARC provides mass care to disaster victims, including fixed site and mobile feeding, management of congregate shelters for the general population, and bulk distribution of supplies. The ARC will not be

responsible for establishing and managing shelters for special needs populations. DHR will be responsible for the operation of special needs shelters, whether co-located with general population shelters managed by the ARC or established in separate locations.
c. Emergency shelter, mass shelter or other shelters are provided during and after an emergency or disaster where individuals are housed as a result of evacuation or, on a limited scale, pending repair of owner dwellings. An emergency shelter is not intended for prolonged periods of occupancy. The provision of emergency shelter for victims includes: the use of predisaster designated shelter sites in existing structures, creation of temporary facilities and use of similar facilities outside the affected area.
d. The ARC designee will represent the organization in mass care and shelter administrative and operation responsibilities in conjunction with DHR Division of Family and Children Services (DFCS). DFCS will maintain the statewide shelter list and coordinate and implement the Disaster Food Stamp Program.
e. The provision for feeding disaster victims and emergency workers via fixed sites, mobile feeding units and bulk food distribution will be accomplished in coordination with ARC; Departments of Agriculture, Corrections, Defense and Education; Georgia Building Authority; Georgia Baptist Convention; and other volunteer organizations. Operations will be based on nutritional standards and include special dietary requirements of persons with special needs. DHR will coordinate requests for issuance and distribution of the Disaster Food Stamp Programs through the United States Department of Agriculture (USDA).
f. Emergency first aid services will be provided to disaster victims and workers at all mass care facilities and designated sites within the disaster area. First aid will be available to supplement emergency health and medical services established to meet victims' needs.
g. ARC Disaster Welfare Information services will be provided to aid in reunification of family members within the affected area who are separated at the time of emergency or disaster.
h. Requests for emergency clothing, bedding and other items lost, damaged or destroyed as a result of an emergency or disaster will be forwarded to volunteer organizations.
i. Mass care shelter facilities will receive priority consideration for logistical and accessibility support requirements and structural inspections to ensure health and safety of victims.

2. Actions
a. Mitigation/Preparedness

i. Develop memorandums of understanding with volunteer organizations
ii. Identify and survey shelters to ensure sufficient space and services for victims and essential workers;
iii. Maintain a list of shelter managers and train personnel in all

phases of shelter management;
iv. Prepare shelter management kits (e.g., registration forms and logs);
v. Develop public information materials to support shelter operations; and
vi. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Manage and operate general population shelters through ARC and DHR DFCS in coordination with local emergency management agencies (EMAs);
ii. Provide mobile feeding and meals at fixed feeding locations;
iii. Distribute donated goods and potable water;
iv. Provide Disaster Welfare Information services;
v. Secure personnel and operate shelters, feeding units, emergency first aid services and Disaster Welfare Information;
vi. Secure transportation;
vii. Establish communications between shelters, feeding units, emergency first aid services and volunteer location(s);
viii. Administer the federal Individuals and Households Program;
ix. Close and restore shelters to pre-emergency conditions;
x. Coordinate public information and provide updates for ESF 15, External Affairs;
xi. Maintain financial records on personnel, supplies and other resources utilized and report to GEMA upon request; and
xii. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.
B. ARC Board of Governors' Disaster Services Policy Statement of July 1977.

Appendix F

Georgia Emergency Operations Plan

EMERGENCY SUPPORT FUNCTION ANNEX 8
PUBLIC HEALTH AND MEDICAL SERVICES

Primary Agency
Department of Human Resources (DHR)

Support Agencies

AGENCY RESOURCE	AGENCY RESOURCE
American Red Cross First Aid	Mental Health
Board of Regents of the University System of Georgia	Facilities, Personnel
Department of Administrative Services	Procurement, Vehicles
Department of Agriculture	Animal Disease and Injury, Laboratory Support, Technical Assistance-Food
Department of Corrections	Equipment, Personnel, Vehicles
Department of Community Health	Personnel, Technical Assistance
Department of Defense	Aircraft, Equipment, Helicopters, Personnel, Site Security, Supplies
Department of Education	Facilities, Food
Department of Labor	Employment Counseling, Personnel
Department of Natural Resources	Water Quality Control, Waste Treatment
Department of Public Safety	Aircraft, Communications Equipment, Escort/Traffic Control, Site Security
Department of Technical and Adult Education	Equipment, Personnel
Department of Transportation	Aircraft, Escort/Traffic Control, Technical Assistance-Construction, Vehicles
Georgia Building Authority	Building Design, Construction, Maintenance
Georgia Bureau of Investigation	Investigations, Laboratory Facilities
Georgia Forestry Commission	Vehicles
Georgia Hospital Association	Medical Facilities, Personnel
Georgia Nurse Association	Personnel
Georgia Technology Authority	Communications, Information Technology Support
Prosecuting Attorneys Council of Georgia	Personnel

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan (NRP) ESF 8 (Public Health and Medical Services). The Department of Human Resources (DHR) assumes primary responsibility for the following functions. The function of medical care includes emergency medical services (EMS), hospitals, clinics, first aid stations, facilities, and medical care, including doctors, nurses, allied health professionals, technicians and support staff, supplies, pharmaceuticals, vaccines, equipment, immunizations and related services.

The function of Public Health includes staff, equipment, supplies and services used in the detection, investigation and control of diseases and health conditions.

The function of environmental health includes staffing, supplies and equipment essential to: (1) prevent communicable diseases and contamination of food and water and (2) develop and monitor health information, inspection and control of sanitation measures, inspection of individual water supplies, disease vector and epidemic control, laboratory testing, and facility and shelter inspections.

The functions of Crisis Counseling, Grief Assistance and Rehabilitation Services include professional personnel, services and facilities to address mental health concerns and conditions of victims and responders caused or exacerbated by an emergency or disaster or the associated aftermath.

B. Scope

To coordinate and/or deliver public health, environmental health, medical services and mental health services; to facilitate the provision of support and services by private resources; and to coordinate the supplementation of disrupted or overburdened service resources and personnel to relieve suffering and/or trauma of victims.

II. Policies

A. Direction and Control

1. This ESF will be activated by the Georgia Emergency Management Agency prior to, during, or following an emergency or disaster. GEMA will notify the primary agency.
2. The agency with primary responsibility shall provide an Emergency Coordinator and Alternates to coordinate the responsibilities of the ESF. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.
3. The primary state agency, working with GEMA, will notify the support agencies as needed.

B. Federal Response

1. It is understood that the next level of response available to the state is a Federal Regional response.
2. In a Presidential Declaration, federal agencies are authorized to provide states and local governments with emergency personnel, equipment, facilities and supplies essential to save lives and to preserve or protect public health and safety.
3. Through an interagency agreement with the Federal Emergency Management Agency (FEMA), Center for Mental Health Services staff helps to ensure that victims of Presidentially declared disasters receive immediate, short-term crisis counseling, as well as ongoing support for emotional recovery.

C. Other

1. In compliance with Health Insurance Portability and Accountability Act, to ensure the protection of patient confidentiality, medical information on individual patients will not be released to the general public. Information necessary for medical treatment and the control of diseases and health conditions may be shared among health providers and with Public Health.
2. In circumstances in which a disease or condition is suspected of rapid transmission, the protocols developed within ESF 15 will be employed to disseminate information and risk communication to the public regarding symptoms and appropriate preventative and protective actions.

D. Notifications

1. Local

   Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.
   All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agency. The primary agency will notify support agencies as needed.

2. State
   All requests for federal assistance will be coordinated with GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal
   All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Medical Care

1. Strategy

a. DHR will coordinate with appropriate agencies and organizations to ensure operational readiness. DHR will develop and maintain Standard Operating Procedures (SOPs).

b. Upon state request, local agencies of DHR units will report to the local emergency management agency (EMA) to assess health and medical services needs associated with the emergency and coordinate assistance through the local Emergency Operations Center (EOC).

2. Actions

a. Mitigation/Preparedness

i. Develop and/or maintain relationships with professional associations and private agencies/organizations, including hospitals, that may be of assistance in providing medical services;

ii. Identify and document resources to supplement local emergency medical care. Resources include facilities, personnel, equipment, vehicles, and supplies available for use in a medical emergency;

iii. Plan for temporary medical facilities where hospitals and medical centers are not available;

iv. Assist hospitals and long-term health care facilities, including nursing homes and assisted living centers, in patient evacuation and relocation planning;

v. Continue development of the DHR Emergency Management Team and identification of accompanying resources within DPH, MH/DD/AD and private agencies/organizations resources;

vi. Identify, train and provide technical assistance to professional staff and volunteers of emergency medical services; and

vii. Participate in and/or conduct training, exercises and tests.

b. Response/Recovery

i. Coordinate, deliver and/or manage emergency medical personnel, facilities, vehicles, equipment and supplies for victims, including people with special needs;

ii. Maintain the DPH and GEMA debris removal agreement for disposal of potential health and safety hazards from private property;

iii. Maintain laboratory facilities capable of analyses necessary for emergency support of health activities;

iv. Implement plan for temporary medical facilities where hospitals and medical centers are not available;

v. Assist hospitals and long-term health care facilities, including nursing homes and assisted living centers, in patient evacuation and relocation;

vi. Provide personnel to designated shelters and other facilities for the provision of health and medical services to disaster victims;

vii. Coordinate disaster-related public information and risk communication, and provide updates according to ESF 15, External Affairs;
viii. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA, upon request; and
ix. Resume day-to-day operations.

B. Public Health

1. Strategy
a. DHR will coordinate with the appropriate agencies and organizations to ensure operational readiness for public health activities. DHR will develop and maintain planning and operations documents to support preparedness and response.
b. DHR will assist with staffing, supplies and equipment essential to: detection, identification, investigation, and control and prevention of diseases.
2. Actions
a. Mitigation/Preparedness

i. Develop and/or maintain relationships with professional associations and private agencies/organizations, including hospitals, that may be of assistance in providing public health services;
ii. Identify and document resources to supplement local emergency public health services. Resources include facilities, personnel, equipment, vehicles, and supplies available for use in such an emergency;
iii. Assist hospitals and long-term health care facilities, including nursing homes and assisted living centers, in planning for patient evacuation and relocation planning;
iv. Continue development of the DHR Emergency Management Team and identification of accompanying resources within DPH, MH/DD/AD and private agencies/organizations resources;
v. Develop emergency immunization protocols and develop protocols for identification of disease, vector and epidemic control;
vi. Identify, train and provide technical assistance to professional staff and volunteers of emergency public health services; and
vii. Participate in and/or conduct training, exercises and tests of public health capabilities.

b. Response/Recovery
i. Coordinate, deliver and/or manage public health activities to include epidemiologic investigations, environmental health response, and laboratory support to assist in the detection, identification, investigation, and control and prevention of diseases;

ii. Maintain the DPH and GEMA debris removal agreement for disposal of potential health and safety hazards from private property;
iii. Maintain laboratory facilities capable of analyses necessary for emergency support of health activities;
iv. Implement plan for temporary medical facilities where needed;
v. Assist hospitals and long-term health care facilities, including nursing homes and assisted living centers, in coordination of patient evacuation and relocation;
vi. Provide personnel to designated shelters and other facilities for the provision of health services and the coordination of medical services to disaster victims;
vii. Coordinate disaster-related public information and risk communication, and provide updates according to ESF 15, External Affairs;
viii. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA, upon request; and
ix. Resume day-to-day operations.

C. Environmental Health

1. Strategy
a. DHR will coordinate with appropriate agencies and organizations to ensure operational readiness. DHR will develop and maintain planning and operations documents to support preparedness and response Standard Operating Procedures (SOPs).
b. DHR will assist with staffing, supplies and equipment essential to:
i. Prevent communicable diseases and contamination of food and water and;
ii. Develop and monitor health information, inspection and control of sanitation measures, inspection of individual water supplies, disease vector and epidemic control, laboratory testing, and facility and shelter inspections. The DHR assumes primary responsibility for this function.

2. Actions
a. Mitigation/Preparedness
i. Foster and/or maintain relationships with professional associations and private agencies/organizations that may be of assistance in environmental health services;
ii. Identify and document resources to supplement local emergency care. Resources include facilities, personnel, equipment, vehicles, and supplies available for use in an environmental health emergency;
iii. Cooperate with public information officers and other staff to educate the general public regarding environmental health concerns;
iv. Monitor and evaluate air, well water and food quality control;

v. Develop procedures to control unsanitary conditions;
vi. Identify laboratory testing facilities;
vii. Continue development of the DHR Emergency Management Team and identification of accompanying resources within DPH and private agencies/organizations resources;
viii. Identify, train and provide technical assistance to professional staff and volunteers of emergency environmental health services; and
ix. Participate in and/or conduct training exercises and tests.
b. Response/Recovery
i. Coordinate, deliver and/or manage emergency environmental health services for victims;
ii. Work with administrators of public information to notify the general public of response actions to the environmental health emergency;
iii. Maintain DPH and GEMA debris removal agreement for disposal of potential health and safety hazards from private property;
iv. Monitor and evaluate air, water and food quality control;
v. Maintain laboratory facilities capable of analyses necessary for emergency support of environmental and health activities;
vi. Provide representation to designated shelters and other facilities for the provision of health and medical services to disaster victims;
vii. Coordinate disaster-related public information and provide updates according to ESF 15, External Affairs;
viii. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA, upon request; and
ix. Resume day-to-day operations.

D. Crisis Counseling

1. Strategy
a. Offer mental health care to disaster victims, survivors, bystanders, responders and their families and other community care-givers.
b. DHR will coordinate with appropriate agencies and organizations to ensure operational readiness. DHR will develop and maintain Standard Operating Procedures (SOPs).
c. DHR will assess the immediate and long - term mental health needs following an emergency or disaster.
d. DHR - Division of Mental Health/Developmental Disabilities/Addictive Diseases (MH/DD/AD) will manage crisis counseling and mental health assistance in coordination with the American Red Cross (ARC), local religious organizations and private agencies/organizations. In the case of an airline accident, federal law designates the ARC as the coordinator of crisis counseling and mental health services. In this case, DHR - MH/DD/AD will coordinate with the ARC and render assistance as requested.

2. Actions

a. Mitigation/Preparedness
i. Develop and/or maintain relationships with professional associations and private agencies/organizations that may be of assistance in mental health and rehabilitation services;
ii. Identify and document resources to supplement local emergency care. Resources include facilities, personnel, equipment, vehicles, and supplies available for use in a medical emergency;
iii. Provide mental health education on critical incident stress and stress management techniques;
iv. Continue development of the DHR Emergency Management Team and identification of accompanying resources within DPH, MH/DD/AD, and private agencies/organizations resources;
v. Identify, train and provide technical assistance to professional staff and volunteers of emergency mental health and rehabilitation services; and
vi. Participate in and/or conduct training exercises and tests.
b. Response/Recovery
i. Coordinate, deliver and/or manage emergency mental health and rehabilitation services for victims including medical services for people with special needs;
ii. Provide representation to designated shelters and other facilities for the provision of health and medical services to disaster victims;
iii. Provide stress management training support to mental health teams responding to disaster survivors and responders;
iv. Manage crisis counseling and mental health assistance including disaster grant programs;
v. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA, upon request; and
vi. Resume day-to-day operations.

IV. References

A. Georgia Emergency Management Act of 1981, as amended, Official Code of Georgia Annotated § 38-3-22(b)(6) http://www.legis.state.ga.us/cgi-bin/gl_codes_detail.pl?code=38=3=22)

APPENDIX G

Glossary of Terms

Accessible: Having the legally required features and/or qualities that ensure entrance, participation, and usability of places, programs, services, and activities by individuals with a wide variety of disabilities.

Agency: A division of government with a specific function offering a particular kind of assistance. In the Incident Command System, agencies are defined either as jurisdictional (having statutory responsibility for incident management) or as assisting or cooperating (providing resources or other assistance). Governmental organizations are most often in charge of an incident, though in certain circumstances private-sector organizations may be included. Additionally, nongovernmental organizations may be included to provide support.

All-Hazards: Describing an incident, natural or manmade, that warrants action to protect life, property, environment, and public health or safety, and to minimize disruptions of government, social, or economic activities.

Assessment: The evaluation and interpretation of measurements and other information to provide a basis for decision making.

DHS: Department of Homeland Security

Disaster: A disaster is a sudden calamitous event bringing great damage, loss, or destruction. Disasters and emergencies comprise emergency management. These situations cause personnel to deviate from their day-to-day operations or require the use of resources outside of normal operations.

Emergency: An emergency is any unique event that causes an urgent need for assistance or relief. It usually requires action but does not constitute a disaster, does not have communitywide impact, nor require extraordinary use of resources or procedures to bring conditions back to normal. O.C.G.A. Section 38-3-3(7).

Emergency Management: Emergency management is a structure used by organizations to prepare for and respond to both emergencies and disasters. The practice of emergency management is composed of four primary phases: preparedness, response, recovery, and mitigation.

Emergency Support Function (ESF): A grouping of government and certain private-sector capabilities into an organizational structure to provide the support, resources, program implementation, and services that are most likely to be needed to save lives, protect property and the environment, restore essential services and critical infrastructure, and help victims and communities return to normal, when feasible, following domestic incidents. The ESFs serve as the primary operational-level mechanism to provide assistance to State, local, and tribal governments or to Federal departments and agencies conducting missions of primary Federal responsibility.

ESF Primary Agency: Local and State agencies and organizations that have lead responsibility to oversee the development, activation, and implementation of specific functions defined within the EOP. Local and State agencies and organizations include Public Health districts; DPH, DHR, and non-DHR entities.

ESF Support Agency: Local and State agencies and organizations that have a support responsibility to assist in the development, activation, and implementation of specific functions defined within the EOP.

Federal: Of or pertaining to the Federal Government of the United States of America.

FEMA: Federal Emergency Management Agency

GEMA: Georgia Emergency Management Agency

Incident: An occurrence or event, natural or man made, that requires a response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.

Local Government: A county, municipality, city, town, township, local public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; an Indian tribe or authorized tribal entity, or in Alaska a Native Village or Alaska Regional Native Corporation; a rural community, unincorporated town or village, or other public entity. See Section 2 (10), Homeland Security Act of 2002, P.L. 107−296, 116 Stat. 2135 (2002).

Mutual Aid Agreement: The pre-arranged agreement that clarifies roles between two or more organizations that if either is in need of assistance because of some event (e.g., natural disaster, man-made emergency), the other(s) will provide support as outlined in the agreement.

National Response Framework *(NRF)*: Guides how the Nation conducts all-hazards response. The Framework documents the key response principles, roles, and structures that organize national response. It describes how communities, States, the Federal Government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. And it describes special circumstances where the Federal Government exercises a larger role, including incidents where Federal interests are involved and catastrophic incidents where a State would require significant

support. It allows first responders, decision makers, and supporting entities to provide a unified national response.

Nongovernmental Organization (NGO): An entity with an association that is based on interests of its members, individuals, or institutions. It is not created by a government, but it may work cooperatively with government. Such organizations serve a public purpose, not a private benefit. Examples of NGOs include faith-based charity organizations and the American Red Cross. NGOs, including voluntary and faith-based groups, provide relief services to sustain life, reduce physical and emotional distress, and promote the recovery of disaster victims. Often these groups provide specialized services that help individuals with disabilities. NGOs and voluntary organizations play a major role in assisting emergency managers before, during, and after an emergency

Preparedness: Preparedness activities, programs, and systems are those implemented prior to an emergency or disaster that support and enhance response to an emergency or disaster. Planning, training, and exercises are among the activities conducted under this phase.

Protocol: A set of established guidelines for actions (which may be designated by individuals, teams, functions, or capabilities) under various specified conditions.

Public Health Emergency: The occurrence or imminent threat of an illness or health condition that is reasonably believed to be caused by bioterrorism or the appearance of a novel or previously controlled or eradicated infectious agent or biological toxin and poses a high probability of any of the following harms: (A) A large number of deaths in the affected population; (B) A large number of serious or long-term disabilities in the affected population; or (C) Widespread exposure to an infectious or toxic agent that poses a significant risk of substantial future harm to a large number of people in the affected population. O.C.G.A. Sections 31-12-1.1(2), 38-3-3(6).

Response: Immediate actions to save lives, protect property and the environment, and meet basic human needs. Response also includes the execution of emergency plans and actions to support short-term recovery.

Special Needs Populations: Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to: maintaining independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited English proficiency or are non-English speaking; or who are transportation disadvantaged.

Standard Operating Procedure (SOP): Complete reference document or an operations manual that provides the purpose, authorities, duration, and details for the preferred

method of performing a single function or a number of interrelated functions in a uniform manner.

State: When capitalized, refers to any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any possession of the United States. See Section 2 (14), Homeland Security Act of 2002, P.L. 107−296, 116 Stat. 2135 (2002).

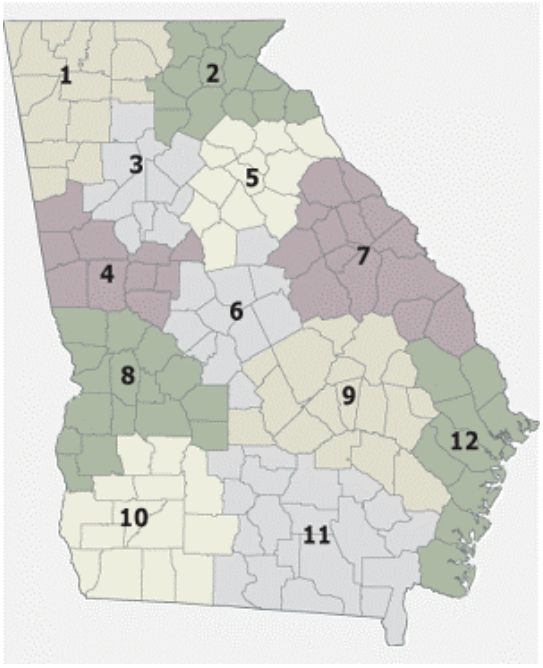
(DHR, 2005; DHS, 2008; GEMA, 2008)

APPENDIX H

Georgia Maps:

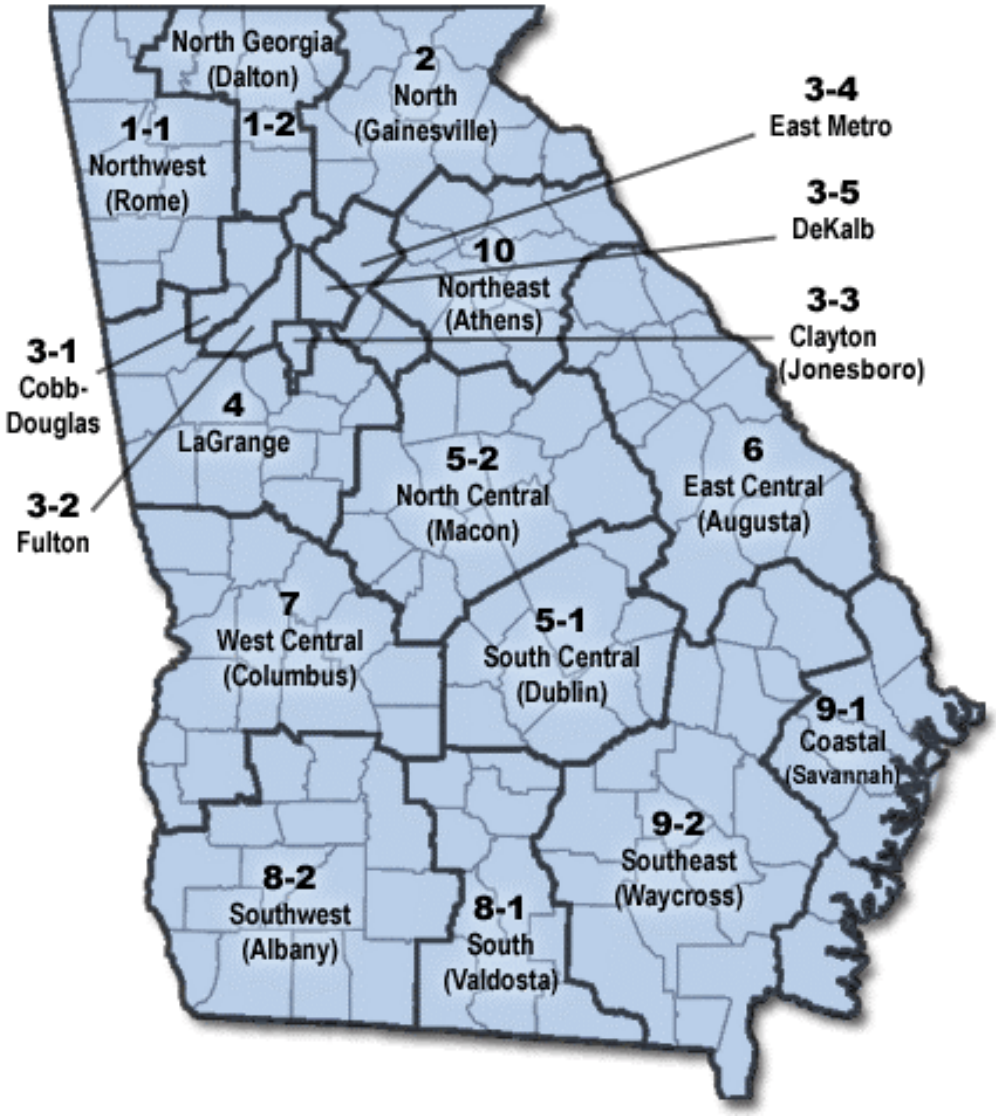
(GA.gov, 2008)

Map of Georgia Counties with Region Numbered



State of Georgia Region 3/ Atlanta Metropolitan Area

APPENDIX I

Map of Georgia Health Districts

(DHR, 2006)