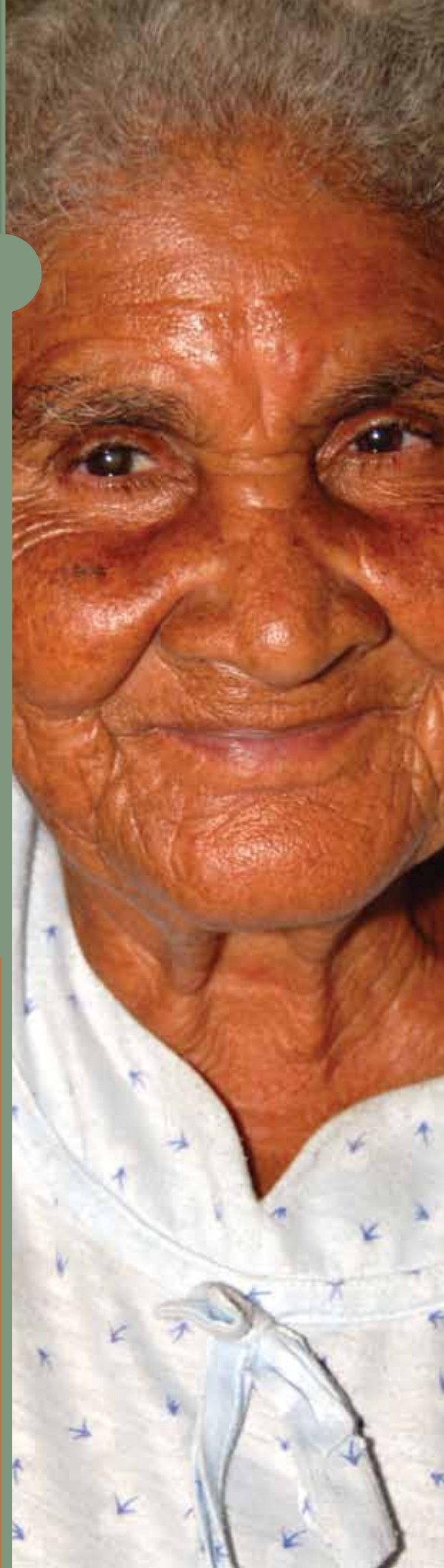
Guidelines for Mainstreaming the Needs of Older Persons in Disaster Situations in the Caribbean

A Contribution to World Health Day 2012
Ageing and Health



Area on Emergency Preparedness and Disaster Relief

Pan American Health Organization
Regional Office of the World Health Organization

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Table of Contents

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Acknowledgments

Numerous individuals both within and outside the Pan American Health Organization have contributed to the drafting and technical review of these guidelines. PAHO/WHO wishes to recognize all the persons and organizations that have supported the process.

From Caribbean countries: Older persons, including those with disabilities; disaster managers, health disaster coordinators, representatives of national and councils/organizations for older and disabled persons; and community personnel from Jamaica, Grenada, the British Virgin Islands, Belize, Trinidad and Tobago, and Suriname, who participated in focus groups and key informant interviews, as well as the Older Persons in Disasters: Expert Consultation meeting in Jamaica, March 2010.

Regional organizations: the International Federation of the Red Cross, in particular, Marylee Ellis, HelpAge International and the Caribbean Disaster Emergency Management Agency.

Independent Consultants: Professor Denise Eldemire-Shearer and members of the University of the West Indies Mona Ageing and Wellness Center who conducted the research and drafting of the guidelines, and Renee Franklin Peroune, who contributed to the technical review and editing.

From PAHO: Nicole Wynter and Monica Zaccarelli Davoli, who coordinated the development of the publication, with contributions from Lealou Reballos, Enric Freixa, Ricardo Perez, Dana Van Alphen, other colleagues in the PAHO/WHO Area on Emergency Preparedness and Disaster Relief, Enrique Vega, PAHO's Advisor on Healthy Aging and Devora Kestel of the Mental Health Programme.

Patricia Bittner undertook the final editing and managed production and Rosario Munoz and Victor Ariscain prepared the layout and design.

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Part I

About the Guidelines

These guidelines have been prepared to help integrate and mainstream the concerns and issues related to older persons into disaster risk management programmes and processes. They outline difficulties faced by older persons in disasters and present actions that should be considered and implemented at different operational levels, from the national policy level through sub-national, facility and individual levels.

These guidelines were developed through a participatory process, involving consultations with disaster management experts and practitioners across the Caribbean and with older persons. Focus group consultations were conducted with older persons of both genders, of various socio-economic levels and from differing geographic locations, including rural/urban and 'at-risk areas' particularly prone to flooding. Key informant interviews were conducted with National Disaster Coordinators, Health Disaster Coordinators, administrators of older persons homes and NGOs serving the community of older persons from BVI, Belize, Trinidad and Tobago, Jamaica, Grenada and Suriname. A draft of the guidelines was refined and validated during an expert consultation meeting with representatives from national and regional institutions in the Caribbean that deal with disaster management and older populations.

The guidelines are intended for governmental, non-governmental and private sector health professionals working in disaster risk management and with older persons at all levels of society. Others who may also find them useful include:

- Policy makers in general and in the field of disaster risk management
- Disaster and social work professionals who may be in touch with older persons
- Emergency workers, including police and fire fighters as well as volunteer organizations
- Organizations working with older persons
- Older persons and their families

Finally, because these guidelines attempt to mainstream the issues of older persons in disasters into national disaster management policy, it is important to examine the mainstreaming process, which seeks to bring these issues to the centre of

attention. In the context of these guidelines, mainstreaming requires analysis of how potential hazard-related events can affect policies, programmes and projects related to older persons and how, in turn, they impact on the disaster vulnerability of this target group. This analysis should lead to the adoption of measures to reduce vulnerability by treating risk reduction as an integral part of the development process rather than as an end in itself.

An understanding of disasters and disaster risk management systems and processes is critical to mainstreaming the concerns of older persons into disaster management programmes and processes. Disaster management is the systematic process of planning, organization, direction and control of all disaster related activities at all phases—mitigation, preparedness, response and recovery. It involves several levels of society, from individuals and the community and local level to national authorities. The Caribbean adopts a multi-hazard and multi-sectoral approach to disaster management, integrating appropriate actions into development planning and management of all four phases. Appropriate action at all points will lead to greater disaster preparedness, reduced vulnerability and/or the prevention of disasters during the next repetition of the cycle.

The Active Ageing Framework presents one approach to mainstreaming the considerations of older persons into the disaster management process. The active ageing process optimizes opportunities for health, participation and security to enhance the quality of life as people age. It provides a framework to integrate the needs and contributions of older persons into disaster management programmes and processes, as it outlines the determinants of active ageing and provides the inputs/ingredients towards this end. Read more about the World Health Organization's Policy Framework for Active Ageing at http://whqlibdoc.who.int/hq/2002/who_nmh_nph_02.8.pdf.

The following four key actions are important and have been incorporated into the guidelines:

1. Communication – providing timely, accurate, practical information which can be understood.
2. Coordination – ensuring complementary action.
3. Education – increasing awareness and knowledge of disasters (the 'what about' and 'what to do' at different phases of a disaster).
4. Accommodation/inclusion – ensuring that policies and activities take into account the needs, capacities, vulnerabilities and perspectives of all age groups.

Ultimately, these guidelines should minimize risk among these vulnerable groups in emergencies and disasters and help them to maintain the highest possible level of health and functional capacity.

Introduction

Although disasters are a common occurrence in the Caribbean, the burden is not shared equally throughout society. The vulnerability of a person or group of persons will affect their ability to cope and survive in a disaster. Older persons, as a group, are frequently identified as among the most vulnerable segments of the population.

While it is true that the vulnerability of older persons is gaining attention, much more needs to be done to meet their particular needs, while at the same time recognizing that they have unique capacities and contributions to make in preparing for and responding to disasters. It is important to keep in mind that a large segment of the over-age-60 population (approximately 20-30%) has one or more disability, whether physical, mental or sensory, and that this percentage increases by each five-year age group, to more than 50% in the over-age-80 group.

The United Nations defines an older person as any person 60 years and over. However, this spans a wide age range and therefore, for research and advocacy purposes, the internationally defined categories are young-old (60-69), old-old (70-79) and oldest-old (80+). The oldest-old is the fastest growing segment among this age group, increasing at a rate of 3.8% per year, compared to 2% per year for the 60 to 79-year olds.[1]

Globally, the population of persons aged 60 and over is rising dramatically. It is estimated that the 2005 global figure of 673 million persons over the age of 60 will increase to more than 2 billion by 2050. The bulk of this increase will occur in developing nations, where the number of older persons is expected to increase from 8% of the population in 2005 to 20% by 2050.[2]

In the Caribbean, the United Nations estimates that the over-age-60 population will increase from 11.1% of the population (4,498,275 persons) in 2005 to 24.6% (12,395,202 persons) in 2050.[3] The Caribbean also has the fastest ageing population in the developing world (see Figure 1) and until 2003, was home to the oldest living person, Elizabeth Israel, 'Ma Pampo,' in Dominica. In 2006, two Caribbean countries figured among the top 25 countries worldwide with the highest percentage of older persons; eight Caribbean countries figured among the top 50.[4] Among the over-age-60 population in four Caribbean countries (Antigua and Barbuda; St. Lucia; St. Vincent and the Grenadines; and Trinidad and Tobago), 16-20% had one or more disability. The rate among women was higher, due primarily to mobility problems.[5]

1. United Nations, Department of Economic and Social Affairs. World Population Ageing. 2007.
2. International Federation of Red Cross and Red Crescent Societies. World Disaster Report 2007 (chapters 3 and 4).
3. This includes Haiti, Cuba and the Dominican Republic.
4. United Nations, Department of Economic and Social Affairs. World Population Ageing, 2007.
5. Economic Commission for Latin America and the Caribbean. Disability in the Caribbean: a socio-demographic analysis of the disabled, 2008.

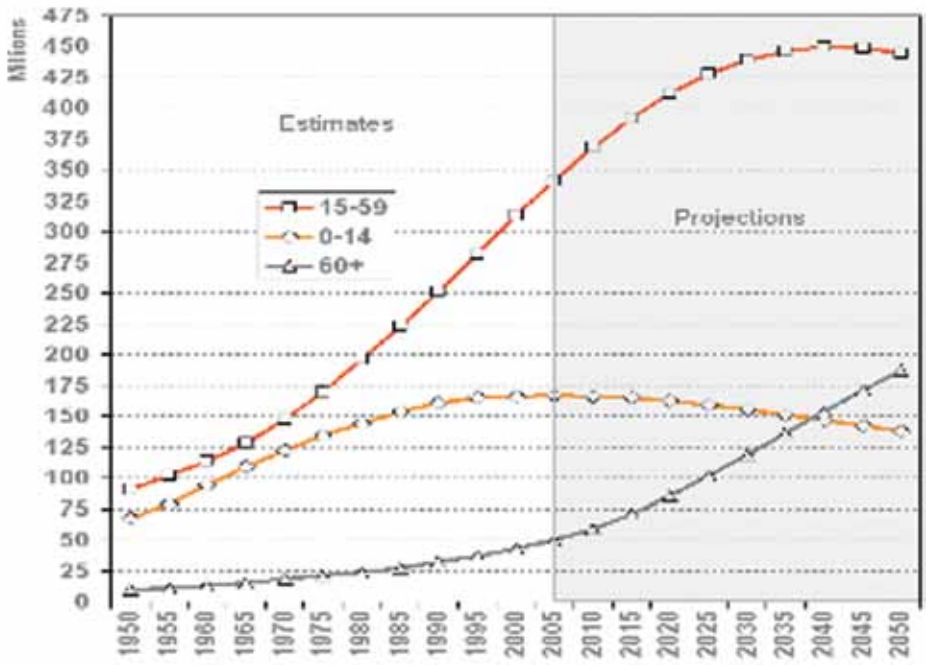

Figure 1. Population by age group in Latin America and the Caribbean, 1950-2050 (3).
(Source: Mona Ageing and Wellness Centre)

In the over-age-80 group, which is seeing the greatest percentage increase, the level of disability is 50%.

Ageing, Health and Vulnerability to Disasters

Older persons measure their state of health by their ability to function, rather than simply by the presence or absence of disease. The World Health Organization recognizes that health includes the capacity of persons to cope with the challenges of life and to maintain physical, mental and social well being. In later years of life, it is common to witness a progressive loss of function, which hinders the ability to adapt to life's challenges and disruptions in one's daily routine. This is further exacerbated in disaster situations, even among those who were apparently functioning well prior to the event.

Health is also related to social support systems, lifestyle choices and socio-economic status. A major issue faced by the older population in some Caribbean countries is low social security coverage, including low health insurance coverage, which is lowest among rural older women and can affect access to health care. In others, such as many in the Eastern Caribbean, pensions and other social benefits are however available for older persons, and health care including medicines and hospitalization are free for patients over 60 years of age. Inadequate transport systems also impact health care coverage generally, and more so after disasters.

Impact of ageing on increased vulnerability to disasters

Older persons are a very diverse group; not all older persons are equally vulnerable to hazards. Therefore, it is important to identify those who are vulnerable. The degree and severity to which older persons are affected in emergencies and disasters depend on the specific characteristics of the person, the type and severity of the hazard, the disaster management systems in place and the interactions among the three. Advanced age itself does not constitute vulnerability, but rather the problems common in old age often increase vulnerability. These can include deteriorating physical and mental ability, decreased strength, low tolerance for physical activity, functional limitations and decreased sensory awareness. Planners and policy makers should be aware of these factors and consider them when planning to meet the needs of older persons in disasters.

Individual factors

Chronic diseases: a region-wide study of the health of older persons in the Americas found that only 42% of women over the age of 60 reported having good or excellent health, while 49% of men reported their health as good or excellent.[6] The most common chronic health conditions are diabetes, hypertension, arthritis and heart disease.

Disasters often exacerbate well-controlled chronic diseases by interfering with their treatment and management when:

- Medications and other supplies are lost and/or destroyed in disaster situations;
- Dietary requirements are affected by disruptions to the food and water supply;
- Health services are disrupted, health facilities are damaged and staff and patients are unable to access services due to impassable roads;
- Associated stress and increased physical activity aggravate chronic conditions such as diabetes and heart disease;
- There is a breakdown in existing public health services, sanitation, water quality and sewage disposal.

Mental health problems are common in old age and preexisting mental health problems can make the disruptions associated with disasters seem much worse.

6. Pan American Health Organization and the Merck Institute of Ageing. The State of Ageing and Health in Latin America and the Caribbean, 2004.
7. World Health Report. Determinants of mental health and behavioural disorders, 2001. http://www.who.int/whr/2001/chapter2/en/index7.html.

Studies show that 8-20% of older persons being cared for in the community and 37% at the primary care level suffer from depression.[7] Not all dementia is recognizable in the early stages and older persons affected by this condition often have developed coping mechanisms that mask the problem. Consequently, family members are sometimes unaware of their limitations and in general, they may not be identified as 'at-risk' prior to the disaster. See Annex 6 for further discussion on mental health issues and older persons.

Ageing also causes **limitations in movement**. Limited mobility increases vulnerability in several ways. First, decreased mobility makes it harder for older persons to maintain their home and prepare for a potential disaster such as a hurricane. Secondly, decreased mobility can make it harder for older people to evacuate in a disaster. During the recovery phase, older persons can have difficulty standing in line, walking any distance or sleeping on the floor (as is often required in shelters). Older persons with reduced mobility and/or decreased hearing and vision who live alone can become incapable of getting basic necessities of food and water, especially if they lose electricity and water supply.

Limitations related to **vision and hearing** are particularly significant for coping in disasters. Thirty-five percent of older people in selected Latin American and Caribbean cities report having some form of visual impairment,[8] making it difficult to read or watch warnings and evacuate buildings safely without falling or injuring themselves. Older persons with visual problems are often reluctant to leave familiar surroundings and do not do well in unfamiliar ones. The loss of hearing aids during a disaster will make it harder for them to access information, which in turn, can cause an older person to feel overwhelmed and lessen their ability to respond.

Older persons have different **nutritional** requirements, often needing to eat more frequently than younger people. They also require larger quantities of fibre and fluids as well as foods that are easier to chew.

The above issues all have a major impact on their ability to access healthcare and social services such as shelter, water and food. The World Development Report (WDR) 2007 reports that healthcare provided in the aftermath of a disaster may not be appropriate for the medical needs of older people, for example, the need for eye clinics, physiotherapy, mobility aids and specific medication. In addition, public services may be unavailable for many reasons, including blocked roads. Older people may also find it more difficult to carry supplies back to their homes from distribution points; for some, routine physical and financial support becomes unavailable. In the wake of disasters, they are left to look after themselves as families try to get their lives back in order.

8. Pan American Health Organization and the Merck Institute of Ageing. The State of Ageing and Health in Latin America and the Caribbean, 2004; Economic Commission for Latin America and the Caribbean. Disability in the Caribbean: a socio-demographic analysis of the disabled, 2008.

Social factors

- **Poverty** increases the vulnerability of older people to hazards. Groups of persons who tend to live below the poverty line include women, the homeless and older people whose families have migrated, both internally and internationally. For older people living in poverty, it is difficult to invest in measures that mitigate their risk from a disaster (for example, hurricane proofing their house or investing in insurance).
- **Educational levels:** In many Caribbean countries, older persons have a low level of education, as their educational years predate existing educational systems. This has implications for communications before, during and after disasters and requires careful consideration of how messages are prepared and delivered and the literacy level required to understand and act upon them.
- **Gender:** the World Health Organization reports that the health consequences of disasters differ between men and women, although the cause is not known[9] and may be the result of an interaction between social and biological factors. For example, men will take greater risk during disasters and be at greater risk of injury,[10] a point corroborated in the focus groups conducted for these guidelines, where some men admitted that they did not pay attention to warnings and relied on their female partners to take the necessary precautions. Regardless of the reasons for or manifestations of these differences, they must be considered in disaster management programmes.
- **Life changes:** Normal social changes associated with the later years of life can reduce a person's ability to cope with daily life and increase their vulnerability to hazards. These include widowhood, retirement and loss of significant ones. In the Caribbean for example, 70-85% of older men are living with a partner (married or common law) compared to 55-60% of women. This reflects the higher rate of widowhood among women.[11]
- **Family living arrangements** can influence the older person's capacity to cope with disasters. Although the family is the main source of support for many older persons, given their increasing independence, many live alone. Older men are more likely than their female counterparts to live alone and without social support system.

From the focus groups . . .

We need more specific training tailored to meet the needs of the elderly. We are not sensitive to the needs of the physically challenged as it relates to accessing the building

- Shelter Manager

We have been developing a public charter for 'at-risk' communities so their needs can be met

- Administrator

A real challenge is to keep community lists up to date as older persons move and do not tell us

- Administrator

9. United Nations, Department of Economic and Social Affairs. World Population Ageing, 2007; World Health Organization, Department of Gender, Women and Health. Gender and Health in Disasters, 2002; World Health Organization, Department of Gender, Women and Health. Gender Considerations in Disaster Assessment, 2005.
10. WHO, Department of Gender, Women and Health. Gender and Health in Disasters, 2002; Bradshaw, S. Socioeconomic impacts of natural disasters: a gender analysis. Economic Commission for Latin America and the Caribbean, 2009.
11. Eldemire-Shearer, D. Ageing-the Response: Yesterday, Today, Tomorrow. West Indian Medical Journal, 57(6), 577-595. 2009; U.S. Centers for Disease Prevention and Control. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitations in the U.S., 2003-05. Mortality and Morbidity Weekly Report, 53(36), 1089-1120. 2006.

From the focus groups . . .

We get help to 'nail up.' This is a time where people help each other

– Rural Female

We get together after the disaster and we go around helping the community. Those of us who can, help with repairs. I keep a small chain saw I bought back from England to help cut trees

– Rural Male

When we get the warning, we call the chairman of the community and review the plans and check names of shut-in elderly in order to help

– Female Volunteer

Older persons, especially older women, also take care of other family members from whom they do not want to be separated, such as children, sick and/or disabled persons and HIV/AIDS orphans. There is also an increase in female-headed households among the 'old-old' because of demographic shifts and an increase in the over-80 population. These arrangements increase the likelihood that older persons may need help before, during and after a disaster, including to complete basic preparedness, response and recovery tasks such as securing roofs or storing water.

Other issues also have had an impact on traditional family living arrangements. Younger family members are increasingly migrating to towns and cities in other parts of a country and, to other countries. Consequently, they are not available to help in times of disasters. Family members are, however, important sources of information and use technology (e-mail and Internet) to keep in contact, preserving relationships even though physical contact is lessened. In fact, distant family members are often the first source of information regarding imminent disasters. One lady described getting her information about Hurricane Ivan and its threat to Grenada from her son in Texas, via CNN and the Weather Channel.

- **Home ownership** is high among older persons, but their houses tend to be older and poorly maintained because it is difficult for an older person to make repairs. They also face challenges preparing for disasters, as many cannot afford to buy materials needed to protect the home, nor do they have the physical help required to use materials to improve the safety of their homes. Previous experience also influences choices. Men become reluctant to secure their homes, since they had survived in the past. Women do not seek help, as they perceive they would receive none.[12]

Given the changes in family structure noted above and the increase in the number of frail older persons, it is not surprising that residential facilities and nursing homes are increasing in number. These homes tend to be very vulnerable to disasters. Studies in the region have documented the inadequacies of some of these facilities. Read the story of the Richmond Home in Grenada following Hurricane Ivan in Annex 1.

A rapid telephone interview conducted in Barbados and Grenada, and with the Disaster Management Office of BVI, revealed that there are 31 private residential facilities and two government facilities in Barbados; 12 in Grenada; 131 in Trinidad and Tobago; and two in BVI. The population of these facilities varied from between six in Hermitage and St Cecilia's Homes in Grenada to 90 in the Richmond Home (also in Grenada). In Jamaica, there are 77 registered facilities, including a large government-operated facility for 450 persons. In general, there is little available information on disaster response plans or their capacity to cope in a disaster.

12. Pan American Health Organization. Elderly in Disasters, 2009; Bradshaw, S. Socioeconomic impacts of natural disasters: a gender analysis. Economic Commission for Latin America and the Caribbean, 2009.

Telephone interviewees specifically identified shelters as being inappropriate and uncomfortable for older persons, which was supported by conversations during the focus groups about how shelters (set up to house people left homeless by the disaster) and residential group homes were perceived by older persons.

Focus Group Findings

Shelters	*Residential Facilities*
• Lack of pre-disaster information regarding shelters and evacuation plans • No access for disabled persons • No privacy, water or health care • Inappropriate bedding; height and size of cots • High noise levels	• No regular drills/few protocols • Few smoke detectors • Facilities not involved in community planning • Staff cannot get to the facility • Lack of electricity and water • Breakdown in communication • Many residents have no family to help

Older Persons as Resources in Disasters

Finally, it is important to note that older persons can make positive contributions during times of crisis. Their years of experience make them resilient and a resource to families and communities. They have a sense of history and survival, which helps those around them to cope. After a recent hurricane, almost all referred to earlier storms and the fact they had survived and rebuilt. In a sense, they are well positioned to take leadership roles in emergencies. They can and do provide care for grandchildren, sick family members, animals and neighbours. They also volunteer with community groups.

While it is true that older persons are often less mobile, more medically unstable, and more isolated, placing them in an at-risk group in disaster situations, they also have traits compatible with increased resilience that are important assets, especially in the recovery phase. Participating as actively as they can in community events and making use of available resources will strengthen their resilience further. Although their families will need to remain involved, in general, the resiliency developed by older persons who have experienced disasters in the past can be very helpful to their families.

From the focus groups . . .

I am not going to the shelter. Imagine having to depend on strangers to show you the bathroom, and getting water. People take your things because you are blind

– Visually-impaired female

The people in the shelter do not care, they are not nice, they smoke and curse

- Rural female

I went to the shelter, but better I stayed home. It was cold and damp and my knees swell and hurt. I could not move.

– Rural female

Part II

Recommendations for Action

When disasters or emergencies strike, older people are among the most vulnerable. However, as a target group, they may be forgotten or underserved during the response, often because their needs are not fully understood and therefore not taken into account in the planning process.[13] This section outlines practical recommendations for action at various operational levels. These levels include:

- National Level
- Sub-national Level
- Community Level
- Residential Care Facilities
- Shelters

The recommendations for action are divided into two stages: before a disaster and during and after a disaster. In these guidelines, 'before a disaster' refers to the stages of preparedness, mitigation and warning; 'during and after a disaster' refers to response and recovery.

As mentioned earlier, these guidelines were developed for a wide variety of users at different organizational levels. Some users may wish to consult guidelines in their entirety; others may refer only to selected sections. Consequently, you may find that certain information, which pertains to more than one section, has been included in both to ensure that it is not lost to users who may consult only selected parts of the guidelines.

13. HelpAge International and UNHCR. Protecting Older People in Emergencies: Good Practice Guide, 2012. http://www.helpage.org/resources/publications

Recommendations for action at the national level highlight policy and planning imperatives, while recommendations for action at the sub-national level are primarily operational in nature

Recommendations for Action at the National and Sub-national Level

This section outlines recommendations at the national and sub-national levels. At the **national level**, the recommendations are intended to guide mainstreaming of the needs of older persons into national disaster policies, plans and programmes. The national level refers to a country's highest level of decision-making, where policies and programmes are developed. It includes the Ministry of Health, the national disaster management body, comprising representatives from key government Ministries and agencies, central level representation of non- governmental entities involved in disaster management and interest groups, including organizations with a focus on older persons. Some of the factors that increase the vulnerability of older persons to disasters, such as poverty, inadequate pensions and access to resources for chronic disease prevention and management, extend beyond the control of the individual. Therefore, a wide range of strategies and interventions are needed. Mainstreaming of ageing into all national policies and programmes and attention to vulnerabilities that are particular to or heightened among older persons are warranted.

While national-level guidelines provide policy direction, strategic planning and an operational framework for coordination, it is at the **sub-national level** where policy is translated into action to lessen the impact of disasters on the lives of older persons. The sub-national level includes decentralized arms of political and governmental systems such as municipalities, parishes, counties, regional administrations, and regional health authorities, as well non-governmental organizations represented at this level. These recommendations may be appropriate for Ministry of Health staff at the sub-national level; sub-national representatives of national disaster management organizations; and sub-national representatives of organizations for and comprised of older persons.

Underpinning policy considerations and guidelines is the recognition that disasters disrupt the lives of older persons, particularly those with disabilities, whose increased vulnerability and lesser reserves hinder their ability to cope and re-establish a level of normalcy. There are several points of entry for interventions to improve their situation—prior to the disaster, during the disaster and during the relief and recovery phases.

Before a Disaster

The degree to which governments place emphasis on disaster preparedness, mitigation and early warning prior to a disaster has a significant impact on the health and well being of older persons when disasters strike. As such, the focus of actions before a disaster at the national policy, planning and programming and sub-national operational levels must include the following:

Advocacy

Various factors, as outlined in Part I, contribute to the vulnerability of older persons in disaster situations. Advocating for national policies and programmes that prioritize their needs in disaster situations is a critical starting point and the participation of older persons is also critical in all advocacy efforts.

The following key advocacy messages will raise awareness of ways to improve the situation of older persons in disasters and emergencies:

- **Poverty alleviation programmes must address the needs of older persons.** Areas that specifically address the needs of this vulnerable group include income support and assistance with maintaining their housing, with special attention to the increased vulnerability of older women and rural older persons.
- **Treat older persons as a priority group in housing programmes.** In implementing rehabilitation/mitigation programmes, develop awareness of the need to repair or strengthen housing infrastructure and reduce hazards in the surrounding environment of older people (for example, removal of overhanging tree branches); develop their skills to improve their own housing or provide/promote ongoing assessment and repairs; and relocation of homes away from flood-prone corridors. Consider the needs of older persons in the building planning process as well as in mitigating the impact of disasters. Establish and enforce regulations that govern the location of residential care facilities for older people.
- **Respect the human rights of older people.** Legislation gives weight to the protection of the rights of older persons, helping to change negative attitudes and reduce stigma and discrimination. It is important to advocate for the participation of this target population in the planning, development and implementation of legislation.

- **Build and strengthen institutional capacity to mainstream the needs of older persons in disaster situations.** Improve individual and institutional capacity by sensitizing and training relevant workers (i.e. health and social workers) about the specific needs of older persons in disaster situations. The WHO model of inter-professional training, in which persons from several disciplines are trained in teams, is a recommended approach. It parallels the reality in the field, where the response requires multi-disciplinary professionals, working in tandem, to reach a common goal.
- **Promote interagency and cross-sectoral collaboration to meet the disaster-related needs of older persons.** Many different ministries and entities are involved, in one way or another, in disaster management. Fostering greater collaboration both within and across sectors and entities will maximize efforts and resources and have a greater impact.

Planning

- **Ensure that older persons are represented on disaster management committees.** Older persons must be included in the planning process, which will enable them to voice their specific needs, thereby ensuring that national disaster plans respond to these.
- **At the sub-national level, identify the disaster management coordinating body** or if necessary, mobilize a multidisciplinary team to spearhead these efforts at this level.
- **Utilize the knowledge of older persons in the design and implementation of disaster reduction activities.** Older persons often have lived through disasters in their local environments and can share their experiences. They may have unique knowledge concerning warning signs and safe and unsafe areas. They also have coping skills and survival strategies that are specifically useful for their locale. Older persons are also resilient and can help others cope with the various phases of a disaster. They are credible and authoritative sources of comfort and reassurance.
- **Assess the vulnerability of older persons.** Effectively responding to and planning for the needs of older persons requires an understanding of their current situation, circumstances, challenges, needs, desires and rights. Therefore, an assessment of older persons, including those with special needs, must be conducted. See the section on 'Community Level Recommendations' for guidelines on how to conduct a vulnerability and capacity assessment of this population group.
- **Develop lists of vulnerable older persons and their locations** and support mechanisms to enhance their preparedness and provide relief during and after a disaster. Include this information along with human and material resources which can be accessed after a disaster in the sub-national plans, e.g. parish health disaster plans.
- **Review or develop disaster plans** to ensure that they explicitly include considerations and spacial strategies to reach and address the needs of vulberable groups such as older persons. All aspects of national health disaster plans should consider and address their vulnerabilities and needs. Obtain a copy of the sub-national disaster health plan. If none exists, begin the process of developing one. Ideally, the sub-national plan should be an extension of the national plan adapted, for the specific considerations for that level. Ensure that the sub-national plan takes into consideration the specific needs of older persons.
- **Disseminate the plans widely.** Personnel involved in the execution of the plan must be sensitized and informed of its content and become familiar with and competent in their respective areas of responsibility. Where there is high staff turnover, it is important that new members receive orientation about the plan and their roles and responsibilities. Additionally, use formal and

informal channels where older people meet and socialize (e.g. association of retirees, clubs of older persons, etc.) to disseminate the disaster plans and raise awareness.

- **Periodically, review and update local disaster plans.** National situations are fluid and changes occur over time. New and additional information also becomes available. Consequently, it is critical that the national health disaster plan be reviewed and adjusted to remain up-to-date.

See Annex 2 on Considerations for Incorporating the Needs of Older Persons into National Health Disaster Plans for more information.

Coordination

- **Foster coordination among stakeholders** (coordination between agencies responsible for health care and other services for older persons and agencies responsible for emergency preparedness). This will promote greater efficiency, avoid unnecessary duplication of services, and reduce the potential for confusion and uncertainty about roles in times of disaster. Identifying complementary functions will improve synergy.
- **Strengthen internal communication within and among stakeholder entities** - Implement and/or strengthen coordination and communication mechanisms among operational levels to prevent a disconnect between policy and practice and increase the likelihood that nationally-stated policies and procedures are implemented as intended at field/operational level.

Training

- Train emergency response personnel to be sensitive to and be able to respond to the needs of older persons in disaster situations, including those with special needs.
- Review and update school and in service training. The curricula should include modules on:
  - Vulnerability of older persons, and the life course perspective.[14]
  - Assessing and prioritizing the needs of older persons.

Public Relations and Communications

- Review or develop a communication strategy/plan that specifically includes a targeted strategy for older persons.

14. The life course perspective looks at how chronological age, relationships, common life transitions, and social change shape people's lives from birth to death. Characteristics of the person and the environment in which the person lives also play a part. It is common and sensible to try to understand a person by looking at the way that person has developed throughout different periods of life. http://www.corwin.com/upm-data/16295_Chapter_1.pdf.

- Review and/or develop appropriate information, education and communication material (IEC) for the target population in keeping with the national health disaster communication plan.
- Include older persons in the planning process and in the development of communication material.

Key messages to be communicated to older persons include those addressing: water and sanitation, food and nutrition, personal security and seeking health care. See Annex 3 for more information on communication messages for older persons.

During and After a Disaster

The principal aim of post-disaster interventions targeting older persons is to enable them to begin recovery as quickly as possible and to provide the necessary assistance to prevent or reduce further damage, injury and loss. The focus of response and recovery activities at national level must include the following:

- **Food and nutrition** - Implement, monitor and adjust national food distribution plans/mechanisms and ensure that older persons have access to adequate and appropriate food and water. This target population often has diminished capacity, both physically and financially, to acquire basic commodities in disaster situations and therefore must be among the priority distribution groups. National disaster health plans must include a component addressing the food and nutrition needs of older persons and the necessary allocation of resources from the national budget to ensure this. This plan should also include nutritional monitoring of older persons in the post-disaster phase. See Annex 4 for Food and Nutrition Guidelines.
- **Health Services** – Re-establish health services and access to health services for older persons, paying attention to preserving life, functional capacity and emotional well being. Health services for chronic diseases are particularly important for older persons and services and supplies must be available to meet their needs. Re-establishment of disease surveillance systems is also important in this regard and they must include disaggregation of data by age and gender to monitor the health status of older persons
- **Social Services** – Implement and monitor social recovery and rehabilitation programmes including for housing, particularly for older persons. Because older persons can be valuable resources during recovery, particularly at community level, be sure they participate in the recovery process to the extent possible. See Annex 6 for more information on mental health and psychosocial support for older persons.
- **Restoring Livelihoods** – Implement and monitor post-disaster recovery/rehabilitation efforts that enable a smooth transition back to previous and/or alternative economic activities (subsistence farming, fishing, etc.). By

including older persons in planning and organizing these interventions, it will be more likely that the assistance offered is appropriate and dignity is maintained.

- **Security** - Implement security arrangements to protect older persons, particularly women, against gender-based violence and sexual abuse. In humanitarian crises, this takes on added importance and is a particular concern in shelters (see the following section on Recommendations for Action in Shelters and Annex 8 on Personal Protection and Violence).
- **Monitoring and Evaluation** - Evaluate lessons learnt/best practices after disasters and crises. Share the experiences and coping skills of older persons during the disaster and use the information in post-disaster reviews and to update plans at the national and local levels.

Overall, post-disaster recovery efforts should be gender sensitive and focus on re-establishing the normal social and economic routines of older persons.

Recommendations for Action at the Community Level

The involvement of community organizations is critical to managing the health aspects of disasters. These groups are usually key members of community disaster committees and thus hold an important place in the national disaster management structure. Because they are connected to members of the community, they can facilitate and ensure that the participation and input of older persons is appropriately channeled, included and recognized in the disaster management process.

The **Community Level** refers to the governmental and non-governmental mechanisms within communities. These groupings of local people help to improve the well being of the community. They are often volunteer-based and self-funding. There are many variations in terms of size and organizational structure. They can be formal or informal, rural or urban and with different mandates. Their value lies in their relevant local knowledge and historical recall and the fact that they are present in the community when disasters strike.

This section is written for leaders and members of these organizations. Some community organizations specifically focus on older persons and are affiliated to regional or global mechanisms such as Help Age International; others have a less formal structure (community-based senior citizen clubs, neighborhood watches and church groups). However, to be representative of the community they serve, all must engage older persons, providing an environment in which older persons have an opportunity to genuinely contribute to overall community life.

Before a Disaster

Planning

- **Enlist community support to conduct vulnerability and capacity assessments** (VCA) as the baseline for planning and ongoing disaster reduction activities, such as digging/clearing drains to allow heavy rain runoff, planting mangroves to prevent beach erosion and applying hurricane straps to roofs.

The VCA is a method of investigation, developed by the International Federation of Red Cross Red Crescent Societies, into the risks that people face in their locality, their vulnerability to those risks and their capacity to cope with and recover from disasters.
It was developed to enable National Societies to help communities understand the hazards that affect them and take appropriate measures to minimize their potential impact. These measures are based on the communities' own skills, knowledge and initiatives – thereby preventing these hazards turning into disasters.Consult the Red Cross publication on how to conduct a VCA at: http://tinyurl.com/6vple4d.

- Once the VCA process is completed, develop/update the community hazard mapping process and improve data collection (disaggregated by age and gender) to allow for better understanding of and response to the needs of older persons.
- **Develop lists of vulnerable older persons and their locations** and support mechanisms to enhance their preparedness and provide relief during and after a disaster.
- **Make a list of community resources** that can be called on after a disaster, including human resources (doctors, nurses, health workers, etc.) and material resources (who has a chain saw, an open-back vehicle, etc.).
- In communities with large numbers of older persons, **establish a subcommittee/or advisory body** to the Community Disaster Committee to take responsibility for keeping the needs of older persons in focus and to promote the integration of older persons into the plan.

- Guided by the VCA, **develop comprehensive community disaster plans** that specifically address the needs of the most vulnerable, including older persons. Involve them in the development and implementation of the plan. Consistently update and revise the plan using annual evaluations and drills or simulation exercises, ensuring that the most vulnerable are both reached and have key responsibilities during the exercises.
- Encourage and support the development of **family disaster plans** that incorporate the needs of older persons living in households and **individual disaster plans** for older persons who live on their own.

See Annex 7 on considerations for incorporating needs of older persons in community health disaster plans.

Human Resources and Training

- **Establish teams of trained and equipped local volunteers** (including older persons who are mobile) to identify and address the needs of older persons, including those with special needs, and to provide assistance during all phases of a disaster.
- **Assign appropriate roles** to organizations with distinct skills and provide training in the care of older persons and in disaster management.
- Use **targeted training workshops** to enhance the capacity of older persons to participate and respond to disasters.

- **Train older persons to conduct rapid assessments** in their local areas. Older persons are usually known and trusted by their communities and persons are often more willing to give information on their social, financial and health vulnerabilities to older persons, especially where crime, violence and security concerns exist. Data collection tools should be simple and easy to use to ensure that older persons can participate.
- Involve older persons as volunteers in post-disaster activities geared towards **restoring emotional and psychological health**. Older persons tend to have the moral authority to take on leadership roles in recreational, spiritual, social, educational and other activities.

Public Relations and Communications

- Ensure that the **community disaster plan contains a communication plan**, which includes key communication messages, the methods of communication that work best within the community and key persons who will be responsible for communication and others who can be called upon to assist in implementing the communication plan. See Annex 3 for key health disaster communication messages for older persons.
- Establish an **annual schedule of information sharing and public communication** to familiarize people with existing risks and their community's vulnerability and to establish/re-establish preparedness protocols.
- **Establish community-based early warning mechanisms** (i.e. community crier, door-to-door volunteers) to ensure timely evacuation of older persons, including those with special needs, taking into consideration specific transportation requirements (wheelchairs, walkers, stretchers, canes, etc.).

A substantial number of older persons will need help to evacuate, beyond that which their family or neighbors can provide. Following are several recommendations

- Make identifying, registering, and tracking older persons who cannot evacuate on their own a high priority in local communities.
- Have social services staff work with older persons to develop individualized emergency plans and coordinate this work with local emergency management personnel and those responsible for "special needs" registries.
- Pay special attention to the needs of persons with dementia or similar vulnerabilities.
- Quickly assess the needs of frail older adults who have been evacuated to settings in the community.
- When preparing for disasters in residential facilities, ensure that clients and their medical information, including medications, can be identified during and after evacuation.
- In the interim, encourage individuals to write down their medications, including dosage, allergies, and conditions, and keep it with them at all times.

During and After a Disaster

Overall, post-disaster recovery efforts should focus on re-establishing the routine social and economic life of older persons. Activities should gender sensitive and involve participation, to the extent possible, of older persons throughout the process. As such, the focus of response and recovery activities at community level must include the following:

- **Food and Nutrition** - support and facilitate the organization and distribution of food supplies to older persons.
- **Surveillance** - report to the health authorities any observed illnesses among older persons.
- **Health Services** - guide older persons as to where to go for health and medical care. This is especially important if a health facility has had to be relocated due to damage.
- **Support the re-establishment of health services**, especially those for older persons.
  - Provide volunteer support to health facilities in non-specialized medical areas, as appropriate, to fill gaps
  - Mobilize national health human resources from unaffected areas to backstop gaps that may exist because local health professionals themselves have been affected by the disaster; mobilize national resources (and international resources, if needed) to provide or replenish equipment and supplies that may have been lost or damaged by the disaster (particularly those supplies to treat the most common illnesses among older persons).
- **Social Services** - Encourage older persons to initiate and, if able, lead activities to promote disaster response and recovery for themselves and their peers. Older persons can establish a support network or 'buddy system' to check on and monitor each other before, during, and after a disaster.
  - Provide food, water and other essential services at distribution points that are accessible to older persons and in locations where they do not have to compete with younger persons. For those who are immobile, establish a direct-delivery system staffed by volunteers. Consider, and to extent possible, address security concerns that may affect the retrieval or delivery of these supplies and services to vulnerable groups including older persons.
  - Prepare relief packages of a weight and size that older persons can safely carry.

- **Rehabilitate Housing** - accommodate the specific needs of older men and women who are operating outside of their routine gender-based roles. For example, provide help to older women to repair damaged houses and assist older men who are caregivers.
- **Restore Livelihoods** - a key issue in post-disaster efforts is the disruption in the livelihoods of older persons. Many older persons in the Caribbean support themselves and their families through small-scale economic activities such as cash crop gardens, poultry farming and variety shops. Include older persons in the organization and implementation of economic restoration plans and activities in the community to ensure that their specific needs and circumstances are both understood and met.
- **Security** - Organize and support community policing groups and other security arrangements to safeguard the well being of older persons, including those with special needs, paying attention to women who are particularly vulnerable to gender-based violence.
- **Monitoring and Evaluation** - Monitor the implementation of activities to ensure they are in response to expressed needs and are adjusted according to evolving circumstances. Evaluate the community response to a disaster, seeking input from the wider community; document lessons learned and adjust the community disaster plan if necessary. Share good practices at community level with the national level for incorporation into disaster reviews.

Recommendations for Action in Residential Care Facilities

Residential care is an important component of meeting the health and social needs of older persons. Disaster preparedness in these facilities is critical to ensuring the health and well being of clients and staff.

While these facilities must be incorporated into national, sub-national and community health disaster plans, individual facilities should also have their own disaster plan and staff that is adequately trained and prepared to respond in the time of need.

Residential care facilities encompass both governmental and private facilities that provide living facilities (supervised or independent) to support activities of daily living of older persons. Care and support can be provided round-the clock or in non-residential facilities or day facilities that serve as activity or day care centers.

Transportation for the evacuation of high-risk facilities must be incorporated into all disaster plans. Government infirmaries are often located near the sea or on a hill and in many cases, up to 50% of the population is bedbound. Nursing homes and residential facilities should be designated as 'special' or 'critical' facilities and have priority status for restoration of services, especially electric and water.

Laws must mandate that new residential facilities meet the structural standards of a shelter. Existing facilities must be upgraded to meet basic shelter requirements, with a specified time period for compliance. Residential facilities can be used as designated shelters for older persons in the community. Provisions should be made in the facilities' plans for extra volunteer personnel, extra beds, evacuation routes, etc.

Before a Disaster

Key considerations for ensuring effective preparedness in residential care facilities include the following:

Planning

- Develop a written disaster plan that is in line with the municipal and community disaster plan(s). Include input from staff and able-bodied clients in its development. The plan must stipulate considerations for ensuring the health and well being of clients including:
  - Protocols on measures to be taken for special circumstances such as the death of a resident during a disaster.
  - Evacuation procedures and arrangements for residents with mobility issues (e.g., assigning a specific staff member to assist residents to evacuate the building if necessary).

  - Standard operating procedures for each type of hazard/disaster. Refer to Recommendations for Action for Older Persons and Their Families.
- Use simulation exercises and/or drills (including fire drills) to test the facility disaster plan, at least on a yearly basis, to ensure that all clients and staff are knowledgeable about the procedures to follow in each type of disaster and how to use equipment (e.g., fire extinguisher). Update the plan based on the outcome of the simulation/drill.
- Conduct training for all staff on required procedures and their roles and responsibilities in time of disaster. Provide basic geriatric training to all staff, since they may need to provide care to the older person during disasters.
- Where possible, put in place arrangements to accommodate families (children/spouse) of caregivers (staff) during disasters. Encourage staff members to develop and keep updated family disaster plans and kits with basic supplies.
- Prepare a list of all the clients and staff, documenting the names, address and telephone contact numbers of staff and contact family member for each client. Update this list regularly, as changes occur.
- Prepare and keep accessible a 24-hour staffing roster for emergencies. Include detailed contact information for each person on the list, including his or her roles and responsibilities.
- Make a list of emergency telephone numbers and post this information in pre-identified locations (e.g. lobby, nursing stations, etc.). Post the emergency telephone list near all phones.
- Identify a suitable location to be used as a shelter if evacuation from the facility becomes necessary. Formal arrangements (e.g. letter of understanding, medical care provisions, etc.) should be made to access and use the selected venue(s).
- Maintain a three to five-day supply of water and non-perishable packaged food. Items should be checked every six months to make sure they have not expired. Discard canned items with dents or those that have rusted and food items with an odd smell or texture. Provide training for staff on how to store food for extended periods without electricity.
- Assess water needs and storage capacity, fill water tanks and extra containers to ensure an adequate drinking supply (four liters per client per day).

Health Services and Surveillance

- Include services for managing chronic non-communicable diseases. For persons with chronic disease such as diabetes, maintain hydration to minimize confusion.

- Establish a health surveillance/early warning system for the facility, which considers the special needs and concerns of older persons).
  - Document occurrences of infectious diseases.
  - Determine the availability of services in the facility, including availability of water and electric power, functioning toilets, medical care, etc.
  - Monitor sanitation practices and correct as necessary.
  - Identify health-related issues (such as hand washing and safe water) and raise awareness/educate shelter residents about how to deal with these.
  - Daily assessment of surveillance data is recommended. Ensure that the shelter has case definitions and reporting forms. The person assigned to surveillance activities should be in contact with and report to local public health officials. See examples of a surveillance forms in Annex 5.
- Have available a medical/first aid kit with supplies and equipment to address common medical emergencies and medical conditions. The Red Cross has compiled a generic list of recommended items in a first aid kit. However, these items should be tailored to local conditions (i.e., the population in the residential care facility or the type of disaster). Check the kit regularly, including expiration dates and replace any used or out-of-date contents. The generic list includes:

  - absorbent compress dressings (5 x 9")
  - adhesive bandages (assorted sizes)
  - adhesive cloth tape (10 yards x 1 inch)
  - antibiotic ointment packets (approximately 1 gram)
  - antiseptic wipe packets
  - packets of aspirin (81 mg each)
  - blanket
  - breathing barrier (with one-way valve)
  - instant cold compress
  - pair of nonlatex gloves (size: large)
  - hydrocortisone ointment packets
  - Scissors; tweezers
  - roller bandages (3 and 4 inches wide)
  - sterile gauze pads (3 x 3 and 4x4 inches)
  - oral thermometer
  - triangular bandages
  - First aid instruction booklet

- Maintain a stock of medications for residents periodically reviewing expiraion dates.
- Create a bank of supplies and equipment to meet specific needs of older persons (eyeglasses, hearing aids, oxygen tanks, humidifiers, canes, crutches, walkers, wheelchairs, and basic supplies/amenities).
- Plan for mental health and psychosocial support services for staff.

Alert and Evacuation

- Establish clear procedures for alerting clients and staff about potential emergency events. This could include, for example, an alarm system with flashing

lights, arrows along the pathway to guide clients to their nearest exit, etc. Particular attention should be paid to alternative methods in the event of power outages.

- Develop clear and graphic signage to indicate exits and post maps at doorways with exit routes to be used in emergency situations. Ensure exits are free of obstructions at all times and that keys for exit doors are kept in a wall-mounted key box for emergency access.
- Ensure that clients who require special assistance (i.e. frail, disabled, those with dementia) are easily identifiable (i.e. wearing a yellow or fluorescent wristband) to enable appropriate support during emergencies.
- Pre-arrange transportation for evacuation, bearing in mind the limitations of physically incapacitated clients.
  Remember: Persons with mobility or sight problems cannot escape or evacuate unaided; the hearing impaired will not hear sounds such as alarms. Immobile persons can be put on a sheet and evacuated by two persons. As much as possible, keep clients with physical and cognitive impairments on the ground floor.

Communications

- Establish a system for communicating with residents, their families and staff in emergencies, both within and outside the facility. Make provisions for communicating through alternative means in the event of the loss of electricity or telephone service (for example, use community members as 'runners' to communicate between the facility and relevant agencies).
- Provide HF/VHF radios and train staff to use them.
- Maintain designated cellular phones with prepaid minutes and fully charged batteries.
- Use visual aids such as posters, brochures and flyers to communicate key messages, supplemented by direct verbal communications with individuals or small groups.
- When communicating with older persons, keep communication simple, direct and honest. Too much information can overwhelm older persons, especially those with cognitive impairment.
- Pay attention to any special communication needs:
  - Have paper and pens for hearing-impaired persons to write on.
  - Use pictures and symbols to transmit messages as much as possible.
  - Put all communications on notice boards and regularly update the content.
    Remember: Noise can impede the understanding of older persons, especially those with special needs such as the visually and hearing impaired.

Inspection and Maintenance

- Regularly check and service fire extinguishers in accordance with universal standards. Ensure they are appropriately tagged.
- Conduct maintenance checks and repairs on equipment (alarms, batteries, generators, and fire extinguishers) and fixtures (pipes, hanging cables, shutters).
- Service generators every three months and replenish fuel supply when needed. Additional fuel should be safely stored for use in case of disasters.
- Check the roof of the facility (by persons with appropriate expertise) for leaks or other damage and repair as needed.
- Do periodic assessment of the building to determine or address conditions that may affect its ability to resist disasters.
- Trim trees and remove objects that could cause damage to buildings. Clean and clear all facility drainage systems.

During and After a Disaster

During and after a disaster, the principal aims are to provide the enabling conditions and assistance to older persons to reduce injury, prevent loss of life and property, and to aid their recovery as soon as possible. Activities in residential care facilities must include the following:

- Activate the emergency plan's procedures and report the emergency event to the relevant authorities through pre-identified channels of communication.
- Check on clients frequently and reassure them. If possible, notify family members of the emergency and the status of their loved ones.
- Ensure clients wear protective clothing and sturdy shoes for a potential evacuation.
- Ensure clients with special needs are wearing alert ID/information tags to inform caregivers of medical history.
- Store medications properly, particularly those items that may need refrigeration. Coolers with icepacks can be used for cold storage during power outages.
- Maintain an updated list of residents/clients and staff in the facility during and after the disaster.
- Keep residents/clients informed and take the time to provide simple explanations and avoid confrontational situations that may increase their anxiety. It is important that residents are reassured and their daily routines maintained

as much as possible. Additionally, for persons with dementia, limit news exposure and try to keep them occupied.

- To the extent possible, rotate staff members to avoid work overload.
- Listen to the radio or television for regular news reports and instructions.
- The evacuation warden must ensure that all residents and staff have exited the facility. Assemble residents/staff and check ('roll call') at pre-designated locations if possible.
- When evacuating the premises, take all pre-packed kits of disaster supplies. Use travel routes designated by local authorities and avoid shortcuts, since these may be impassable, dangerous or pose a security risk.
- If necessary, administer first aid or get help for seriously injured person(s).
- Evaluate the building and note any damage. If possible, take pictures to document damage. When inside the building, check damage using flashlight/torchlight. Do not use open flames (matches or candles) or turn on electrical switches.
- Check for fires, electrical and other hazards. If a gas leak is suspected, turn off main gas valve, open windows, and evacuate the building. Contact the fire department if chemical fumes are inhaled; in the event of a chemical spill, the fire department will provide information and assistance on how to deal with the hazard.

Recommendations for Action in Shelters

These guidelines are intended to enable authorities to establish and manage shelters and temporary settlements in a way that makes them sensitive to the needs of older persons, in other words, 'age-friendly.' These recommendations should be used in conjunction with, and not as a replacement for, National Shelter Guidelines.

There is no standard model for shelters in the Caribbean, and as a result, there is substantial diversity. There are 'purpose-constructed' shelters, such as in Grenada, where a model hurricane shelter was built after hurricane Ivan. However, in most cases, existing public buildings that have been pre-designated as potential shelters, take on this role in disaster or emergency situations. These public buildings are usually schools, churches, and other multi-purpose buildings. In some situations, such as an earthquake, when the structural integrity of a building is unknown and/or there is fear of re-occupying it, tent cities are set up to provide temporary accommodation.

Shelters are facilities used to provide temporary accommodation for persons unable to continue their living arrangement in regular family units, usually because of the destructive impact of natural or man-made hazards. Shelters provide security and privacy for individual households as well as protection from the weather. In addition they serve as a location at which relief assistance and post-disaster psychosocial support can be easily accessed during the recovery process.

In most cases, it is highly encouraged to accommodate older persons with family, friends or in familiar locations. However, some emergency situations warrant evacuation to public shelters or temporary settlements.

The recommendations for action outlined in this section are intended to ensure that shelters are 'age friendly.' Issues of particular concern related to accommodating older persons in shelters include a lack of adequate infrastructure, access to buildings, bathrooms, food services, overcrowding, lack of privacy and security, inappropriate bedding and high noise levels.

Before a Disaster

Suitable housing (or shelter) for older persons is critical in disaster situations. When planning for shelter programs, it is essential to identify and address the needs of vulnerable older people and engage them in the decision making so that shelters are as 'age friendly' as possible.

Planning

Consider the following when selecting or preparing a site to be used as a shelter:

- **Pre-shelter preparations**
  - Conduct annual inspections on designated facilities to ensure continued suitability for use as a shelter and compliance with national regulatory guidelines.
  - Identify and address issues in the facilities which could pose challenges for older persons including those with special needs. Refer to guidelines in this section, including associated annexes.
- **Sleeping Accommodations**[15]
  - Designate an area for older persons and their families close to bathroom facilities. Remember: Older persons should be kept within their family unit at all times.
  - Never exceed the building's occupancy load.
  - Minimum floor space of 3.5 sq. metres (40 sq. feet) per person for sleeping.
  - Minimum distance of 75 cm (2.5 ft.) between beds.
  - The occupancy load and the available floor space will determine the number of persons the shelter can serve.
- **Bathroom Facilities**
  - Where possible, designate bathrooms for older people. Arrange for portable toilets/bed pans, etc. if bathrooms are not close by.
  - Establish separate bathroom facilities for males and females.
  - One water closet per 20 persons.
  - Toilets wherever possible should be integrated into the main building.
  - One hand washbasin per 10 persons.
  - One shower per 30 persons.
- **Daily Water Requirements**[16]
  - 2.5 - 3 litres per person for drinking.
  - 2 - 6 litres per person for washing/cleansing.
- **Transportation**
  - Develop a plan to transport older persons to the nearest shelter. Make provisions for vehicles that can accommodate wheelchairs and other aids such as walkers.

15 http://www.who.int/water_sanitation_health/hygiene/emergencies/em2002chap6.pdf
16 http://www.sphereproject.org/handbook/

- **Supplies**
  - Have a medical/first aid kit available with supplies and equipment to address common medical emergencies and medical conditions.
  - Create a bank of mechanical and electronic equipment to meet specific needs of the older person (eyeglasses, hearing aids, oxygen tanks, humidifiers, canes, crutches, walkers, wheelchairs, and basic supplies and amenities).

Prepare to be able to offer health services

Public health officials who provide coverage to the community in which the shelter is located should define the best suitable mechanism to provide periodic health services to those using the shelters. This includes organizing with shelter managers and coordinators institution of measures to help with identification of sick persons, notification of major health problems, and provision of social support to those most in need.

- Include services for managing chronic non-communicable diseases. For persons with chronic disease such as diabetes, maintain hydration to minimize confusion.
- Establish a health surveillance/early warning system for the facility, which considers the special needs and concerns of older persons.
  - Document occurrences of infectious diseases.
  - Determine the availability of services in the facility, including availability of water and electric power, functioning toilets, medical care, etc.
  - Monitor sanitation practices and correct as necessary.
  - Identify health-related issues (such as hand washing and safe water) and raise awareness/educate shelter residents about how to deal with these.

  Daily assessment of surveillance data is recommended. Ensure that the shelter has case definitions and reporting forms. The person assigned to surveillance activities should be in contact with and report to local public health officials. See an example of a surveillance form in Annex 5.
- If the shelter phase is prolonged, mental health and psychosocial support may become necessary, plan for mental health and psychosocial support services for staff.

Shelter Inspection

- Conduct annual inspections of designated shelter facilities to ensure they continue to be suitable for use as a shelter and comply with national regulatory guidelines.
- Identify and address issues in the facilities that could pose challenges for older persons, including those with special needs. Refer to planning guidance under 'before a disaster' in this section on recommended actions for shelters.

Training

- Train shelter staff to recognize and address specific needs of older persons. When a shelter is activated, at least one staff member should be placed at the shelter and assigned to support older persons.
- Train selected shelter personnel in first aid; ensure they are equipped with first aid kits that have sufficient supplies for the capacity of the shelter.
- Conduct surveys of knowledge, attitudes, and practices to determine existing levels and plan training on ageing and health issues.
- Train key shelter staff in basic first aid.

Key Topics for Training

- Cognitive challenges
- Challenges related to each disability
- Mental health and psychosocial support in emergencies
- Communicating with older persons
- Impact of background noise on hearing and understanding by the older persons

Public Relations and Communications

Sensitize older persons about what to expect if they are evacuated to a shelter. This will help with the transition and coping with an unfamiliar setting. This information should be routinely shared with older persons and caregivers.

During and After a Disaster

During and after a disaster, the principal aims are to provide the enabling conditions and assistance to older persons to reduce injury, prevent loss of life and property, and to aid their recovery as soon as possible. Activities in shelters/temporary settlements must therefore include the following:

Health Services

- Activate the health services and surveillance system within the shelters (see more in Annex 5).
- Monitor medications brought to the shelter and ensure they are labeled properly with the individual's name.
- Properly store medications, including items that require refrigeration. Coolers with icepacks can be used for cold storage during power outages.
- Institute security mechanisms/arrangements for medications to prevent unauthorized access and use.
- Assist older persons to administer their medications as required. Persons with specific needs, such as insulin-dependent diabetics, may require assistance with administering medication. Pay particular attention to meal requirements for medications.

Care and Protection

- Ensure all older persons are registered in the shelter, as this will facilitate access to resources and services to meet particular needs.
- Designate staff member(s) to identify, monitor and keep records of the specific needs of the older persons registered with the shelters.
- Persons who are visually impaired, those with medical conditions and those with mobility problems may require special/additional assistance. The frail and severely disabled may need supplementary care.
- Ensure that persons with dementia are easy to identify so they receive special assistance (i.e., a bright yellow or fluorescent wristband or armband).
- Treat older persons with respect, dignity and patience.
- Institute social activities to keep them engaged and happy.
- Implement security measures for persons and their property. Pay particular attention to identifying and preventing abuse. See the recommendations on Personal Security and Violence Prevention.

Food and nutrition

- Serve foods that are appropriate for older persons, including those with special needs, such as diabetics.
- Monitor the fluid intake of older persons, ensuring that it is sufficient to prevent dehydration, which can occur very rapidly in this age group.
- See Annex 4, Food and Nutrition Guidelines

Remember Safety and Security

- *Keep related families together.*
- *Have well planned access routes through the building or structure.*
- *Have materials to screen personal and household space.*

Post-disaster interventions in shelters should be gender sensitive and facilitate the re-establishment of normal social life among older persons. These activities should be participatory as possible, involving older persons in as many stages as is possible.

Communications

- Use visual aids such as posters, brochures and flyers to communicate key messages in the shelters, supplemented by direct verbal communication with individuals or with small groups.
- Keep communication simple, direct and honest. Too much information can overwhelm older persons, especially those with cognitive impairment.
- Pay attention to any special communication needs:
  - Have paper and pens for hearing-impaired persons to write on.
  - Use pictures and symbols to transmit messages as much as possible.
  - Put all communications on notice boards and regularly update the content. Remember: Noise can impede the understanding of older persons, especially those with special needs such as the visually and hearing impaired.

Infrastructure

- Keep entrances free from rubble, debris and other obstruction at all times. Passages should also be kept clear for persons with mobility problems or who are visually impaired.
- Keep older persons with their family units at all times. Locate families with older persons in designated areas close to bathroom facilities. Arrange for bedpans for the frail and immobilized.
- Improve access to/into bathrooms – provide ramps, rails, bath seat in showers. Avoid placing outdoor bathroom facilities in areas that are muddy or overgrown. This could have serious consequences for older persons, who may slip or fall, causing hip or other fractures.
- Elevate cots to required levels for persons with mobility issues. When using blocks to elevate cots, ensure that the cot's stability is not compromised, putting older persons at risk for injury.
- Have an adequate supply of cots and blankets, as older persons are susceptible to hypothermia associated with damp and cold.

Activities for Older Persons in Shelters or in the Community

Daily activities: to the extent possible, try to maintain daily routines (such as prayer in the morning, personal hygiene or time with friends).

Story telling: older persons can keep children occupied by telling stories about the community from times gone by, of important and famous people in the community or country, about themselves when they were younger, etc. This keeps the older person active, gives them purpose and keeps children occupied and learning about their community and country or folklore.

Damage assessments: include older persons as volunteers to conduct assess damage in the community. Ensure that they are trained to use assessment tools, which are easy to understand and apply.

Recommendations for Action
Older Persons and Their Families

Being prepared for a disaster can reduce anxiety fear and loss. Some disasters, such as hurricanes, have a warning period, during which preparations can be made; others, such as an earthquake, are sudden onset, leaving no time for final preparation. It is in the interest of older persons and their families and caregivers to know how to minimize their risk.

The following recommendations outline general steps to improve preparedness for disasters and emergencies.

General Preparedness

Learn what risks your community faces and use this information to prepare appropriately.

- Learn what the community disaster plan addresses.
- Establish contact and a relationship with the community disaster focal point; do not wait for them to contact you.
- Develop a family disaster plan or a personal preparedness plan if you live alone. See Annex 9 on guidelines for developing a personal or family disaster plan.
- Create a support network - identify family and friends who will be able to help in the event of a disaster and discuss it with them.
- Share key information including telephone or other contact information with your identified support network.
- Identify your special needs and how you will meet them; discuss these with your support network.
- Keep yourself as healthy as possible to ensure proper control of chronic illnesses or other health issues.

Seven important points to discuss with your support system—whether family or friends

1. Make arrangements for your support network to immediately check on you after a disaster and, if needed, offer assistance and vice versa.
2. Exchange important keys.
3. Show key persons where you keep emergency supplies.
4. Share copies of your relevant emergency documents, evacuation plans and your health information including medications.
5. Agree and practice a communications system regarding how to contact each other in an emergency. Do not count on the telephones working.
6. You and your personal support network should always notify each other when you are going out of town and when you will return.
7. The relationship should be mutual. Learn about each other's needs and how to help each other in an emergency. You could be responsible for food supplies and preparation, organizing neighborhood watch meetings and interpreting, among other things.

Recommendations for Action Hurricanes and Flooding

The recommendations that appear below are geared toward older persons as well as the general public. Because older persons may have limitations or special needs, it is a good idea to review these recommendations with them and their families as hurricane season nears.

It is important for older persons to articulate their concerns to family members and others in their support network and work with them as a team to prepare. Arrangements should be made for someone to check on an older person at the time of a disaster. Include any caregivers in meetings and planning efforts.

To begin, older persons can assess themselves and their household, including their personal abilities and limitations that may affect their response to a disaster. Think about how to resolve these or other questions, and discuss them with family and friends. Details are important to ensure that a plan meets the needs of the older person.

Preparedness

Protect Yourself

- Make an inventory of hurricane supplies that you have on hand or will need to purchase, including water boots, raincoats, flashlights, batteries, radio, hurricane lamp, hurricane shutters, hooks and latches, plastic bags, nails, rope and matches.
- Stock a four to five day supply of food that does not need cooking.
- Store water for five days: four liters per day for drinking; 20 liters per day for other activities.
- Refill prescriptions for one month, checking expiration dates and securing medicines and prescriptions in plastic. Ensure that first aid supplies are available.
- Identify the nearest shelter and what transportation is available to get there.
- Have a plan including an escape route and share it with family/support systems.
- If you have a caregiver, plan with them – will they bring the family to you or do you have to make alternative arrangements?
- Check your area's storm surge history and elevation.
- Know who your Parish Disaster Coordinator is.
- Make sure insurance policies are up to date and your home and contents have adequate coverage.

- Listen to all warnings and bulletins via radio or television. Have a clear understanding of the terminology associated with hurricanes (watch, warning).
- Fill vehicle(s) with petrol and park on high ground, preferably in a garage or other shelter.
- Secure important papers and possessions in plastic bags.
- Locate electrical lock off and breakers.
- Charge all cellular phones and add phone credit.

Protect Buildings and Property

- Trim trees with branches next to buildings and electrical lines.
- Check or have the roof checked and secure shingles/roofing material and outdoor facilities – kitchen, latrines (get help if necessary).
- Keep a supply of nails, ply, hammer, and plastic/tarpaulins to secure items.
- Store chemicals, fertilizers and other toxic materials in a safe area in waterproof containers.
  If a hurricane warning is put into effect, additional measures should be taken. These include the following:
- Remove all outdoor hazards such as television and other communication antennae and hanging signs.
- Ensure that all items on the outside (e.g. bicycles, lawn furniture, garbage cans) that can be blown away are secured or placed inside. Take down awnings, hanging plants.
- Tape glass windows to secure them. If your building has extensive glass frontage, clear out that section of the building as much as possible and use ply/shutters to protect the glass. If ply/shutters are not available, strong masking tape should be used to tape "X" across the glass to prevent splinters from scattering in case the glass shatters.
- Secure furniture and equipment above water level, battening windows and doors firmly and securing shutters, especially if the building is located in flood-prone areas.
- Secure animals – have a plan for them and dry food and water – you will not be able to cook dog food.
- Move motor vehicles to safe spot away from trees.
- Keep calm, listen to the radio, and be prepared to evacuate.

During the Hurricane

- Continue to listen to the radio for reports.
- Do not go outside unless absolutely necessary.
- Do not open windows and doors that are exposed to the full force of the winds.
- Use the brief time during the eye of the hurricane to make any repairs.

After the Hurricane

- Clean up debris and make emergency repairs.
- Do not touch loose or dangling electrical and cable wires.
- Remove ply/shutters and store.
- Boil all drinking water for at least 10 minutes or use bleach to purify according to instructions from the health department.
- Protect yourself before going outside.
- Do not empty stored water until safe drinking water has been restored.
- Check for damage to structure of facility and equipment.
- Report damage to electrical, water or sewer mains to local authorities.

Recommendations for Action
Earthquakes

Earthquakes occur suddenly, with little or no warning. Much of the damage caused by earthquakes is predictable and preventable by applying knowledge to enact and enforce up-to-date building codes, retrofit older unsafe buildings, and avoid building in hazardous areas, such as those prone to landslides. On an individual basis, most earthquake-related injuries and deaths result from collapsing walls, flying glass, and falling objects caused by the ground shaking.

Preparedness

Protect your home and surroundings

- Bolt and brace water heaters and gas appliances to wall studs. If the water heater tips over, the gas line could break, causing a fire, and the water line could rupture.
- Bolt bookcases and other tall furniture to wall studs. Brace or anchor high or top-heavy objects. During an earthquake, these items can fall over, causing damage or injury.
- Hang heavy items such as pictures and mirrors away from beds, couches and anywhere people sleep or sit. Earthquakes can knock things off walls, causing damage or injury.
- Brace overhead light fixtures. Overhead light fixtures may fall during earthquakes, causing damage or injury.
- Install strong latches or bolts on cabinets. The contents of cabinets can shift due to the shaking. Latches will prevent cabinets from opening and spilling out the contents. Place large or heavy objects on shelves near the floor.
- Store weed killers, pesticides, and flammable products in closed, secure places.
- Locate both safe and dangerous spots around the home so that you can act quickly should the need arise.
- Maintain emergency equipment such as radios, medical supplies, etc.
- Ensure that there are adequate emergency supplies to last for three days.
- Know how to shut down utilities at their source to prevent gas and water leaks and to secure electrical lines.
- Identify emergency and alternate exit routes.

Survival Supplies

- *Portable radio and extra batteries*
- *Flashlight and extra batteries*
- *First aid kit and book*
- *Canned or dried foods*
- *Non-electric can opener*
- *Fire extinguisher*
- *Bottled water – one gallon per day per person*

Protect Yourself

If inside when the shaking starts

- Move no more than a few steps and drop, cover, and hold on. Most people injured in earthquakes move more ten feet during the shaking.
- For older persons or those with mobility impairment, remain where you are, bracing yourself in place.
- If you are in bed, stay there, hold on, and protect your head with a pillow. You are less likely to be injured if you stay in bed. Broken glass on the floor can injure you.
- Stay away from windows. Windows can shatter with such force that you may be injured by flying glass, even if you are several feet away.
- Stay indoors until the shaking stops and you are sure it is safe to exit. If you go outside, move quickly away from the building to prevent injury from falling debris.
- If you are inside a building along a coastal area, drop, cover, and hold on during an earthquake. Once outside, check for tsunami warnings.

If you are outdoors when the shaking starts

- Find a clear spot away from buildings, trees, streetlights, and power lines and drop to the ground and stay there until the shaking stops. Injuries can occur from falling trees, streetlights, power lines, and building debris.
- If you are in a vehicle, pull over to a clear location and stay there until the shaking stops. Trees, power lines, poles, and street signs may fall during earthquakes. Stopping in a clear location will reduce your risk.
- If you are in a mountainous area or near unstable slopes or cliffs, be alert for falling rocks and other debris that could be loosened by the earthquake. Earthquakes often trigger landslides.

After the earthquake

- Put on long pants, a long-sleeved shirt, sturdy shoes, and gloves to protect yourself from injuries. Immediately evacuate.
- Help people who require special assistance—infants, older persons, those without transportation, large families who may need additional help in an emergency situation, people with disabilities, and the people who care for them.
- Check for injuries and provide first aid.
- If the electricity is out, listen to a portable, battery-operated radio or television for updated emergency information and instructions.

- Look quickly for damage in and around your home, examining walls, floors, windows, ceilings, etc. Aftershocks following earthquakes can cause further damage to unstable buildings.
- Watch out for fallen power lines or broken gas lines and stay out of damaged areas. Hazards caused by earthquakes are often difficult to see, and you could be easily injured. Stay out of damaged buildings. Damaged buildings may be destroyed by aftershocks following the main quake.

- Do not use matches, lighters, appliances or electrical switches until you are certain there are no electrical shorts or gas leaks.
- Use telephones only for emergency purposes.
- Follow the instructions of public safety personnel.
- Report any damage to relevant authorities.
- Look for and extinguish small fires. Fire is the most common hazard following earthquakes.
- Avoid a chemical emergency by cleaning up spilled medications, bleach, gasoline, or other flammable liquids immediately.
- Open closet and cabinet doors with caution. Contents may have shifted during the shaking and could fall, creating further damage or injury.
- Check for gas leaks and damage to electrical systems and water and sewerage lines.

Recommendations for Action
Fire Prevention And Safety

Older persons face unique challenges in both detecting and escaping a fire, putting them at increased risk for death and injuries. Fire safety is important for a number of reasons:

- The reaction time of older persons may be slower when quick action is necessary in a fire emergency.
- Impaired vision, smell and hearing may delay detection of a fire.
- Older persons may have a tendency to forget things, such as switching off electrical appliances when going to sleep or leaving the home.
- Medications may affect their ability to respond and make decisions quickly.
- Many older individuals live alone. When accidents occur, others may not be around to help.
- Many aging seniors reside in older houses, which may have damaged or improper wiring. This is another cause for fire.

Preparedness

Protect Yourself

- Conduct periodic fire drills. Learn to stop, drop on the ground and roll if your clothes catch fire; practice staying as low as possible to the ground when escaping. Practice evacuation blindfolded (if possible), as smoke may reduce visibility. Determine a safe meeting point outside the home.
- Have a planned escape route and keep it clear of obstruction. Know where keys are kept to open exit doors. Doors should be easy to open, so service them regularly.
- Install at least one smoke detector on every level.
- Use candles with care. Burn candles in a sturdy metal or glass holder that cannot be knocked or blown over. Never leave candles burning in a room that no one is in. Most candle fires start in a bedroom at night because the candle is too near combustible material, such as a curtain.
- Do not overload the electrical system. Be careful about plugging too many items into extension cords.
- If burning garbage, do not leave the fire unattended and have a hose or water nearby. Do not burn in dry or windy conditions.
- In the kitchen, fires can occur because of faulty equipment or unattended cook-

ing. Do not wear clothing with loose hanging sleeves; do not leave towels or pot holders near an open flame; use grills or other cooking devices in open areas, away from buildings, trees and foot traffic and watch for children playing nearby.

- Determine the signal that will be used to alert persons of the fire and need to evacuate.

Protect Your Home and Property

- Install fire alarms on every level. Check the batteries once a month and change at least once per year.
- Draw or use an existing diagram of the floor plan and identify two escape routes per room.
- Post emergency numbers near telephones – however, it may be better to evacuate the building and call for assistance when outside.
- Make sure fire extinguishers are checked every year.
- Do not store materials that can burn easily in closed areas or near a heat source.
- Replace electrical wiring if frayed or cracked.
- Make sure wiring is not under rugs, over nails, or in high traffic areas. Do not overload outlets or extension cords.
- Outlets should have cover plates and no exposed wiring.

During a Fire

- Get out as quickly and as safely as possible.
- Feel all doors before opening them. If the doorknob feels hot, use another route if possible.
- Use the stairs to escape.
- When evacuating, stay low to the ground.
- If possible, cover mouth with a cloth to avoid inhaling smoke and gases.
- Close doors in each room after escaping to delay the spread of the fire.
- If smoke is pouring in around the bottom of the door or it feels hot, keep the door closed.
  - Open a window to escape or for fresh air while awaiting rescue.
  - If there is no smoke at the bottom or top and the door is not hot, open the door slowly.
  - If there is too much smoke or fire in the hall, slam the door shut.
  - Call the fire department from a location outside the house.

In case of kitchen fires:

- *Put cold water (not grease) on a burn and cool for 3-5 minutes.*
- *Do not use water on electrical fires. Use baking soda or salt on an oil or grease fire.*
- *Do not try to put out a fire you cannot control. Call for help and get out.*
- *Cover nose and mouth with a cloth to prevent smoke inhalation.*
- *Stay low and leave as the smoke rises.*

After a Fire

- Give first aid where appropriate.
- Seriously injured or burned victims should be transported to professional medical help immediately.
- Look for structural damage. Stay out of damaged buildings.
- Return only when local fire authorities say it is safe.
- Don't discard damaged goods until after an inventory has been taken. Save receipts for money relating to fire loss.

Part III

Annexes

Annex 1 Impact of Hurricane Ivan on the Richmond Home in Grenada

Annex 2 Considerations for Incorporating the Needs of Older Persons into National Health Disaster Plans

Annex 3 Health Disaster Communication Messages for Older Persons

Annex 4 Food and Nutrition Guidelines

Annex 5 Surveillance Assessment Forms

Annex 6 Mental Health and Psychosocial Support in Disaster Situations

Annex 7 Considerations for Incorporating Older Persons Needs into the Community Disaster Plan

Annex 8 Personal Protection and Violence Prevention

Annex 9 Guidelines for Developing a Personal or Family Disaster Plan

Annex 10 Health Preparedness for Older Persons

Annex 1
Impact of Hurricane Ivan on the Richmond Home in Grenada

Hurricane Ivan, one of the most intense storms of the 2004 Atlantic hurricane season, badly damaged Grenada's Richmond Home for the Elderly. The entire roof of the main building collapsed, killing one patient. More residents died in the following months, mostly as a result of the increased stress faced by the older persons living in unsanitary cramped conditions following what must have been a traumatic event. This good practice example discusses the repair and retrofitting of the Richmond Home.

The event that prompted action

Hurricane Ivan was one of the most intense storms of the 2004 Atlantic hurricane season, at one point reaching category 5, with hurricane winds in excess of 248 kph. As the massive storm passed near the small Caribbean nation of Grenada in September, the sustained wind speed in the eye wall was 193 kph, with a degree of wind pressure 30-60 per cent greater than prescribed by the Caribbean Uniform Building Code (CUBiC). Fortunately, Hurricane Ivan was a fast moving storm. Had it lingered over Grenada, there would have been more structural damage and much greater rainfall.

Hurricane Ivan badly damaged Grenada's Richmond Home for the Elderly, which also accommodates psychiatric patients. The entire roof of the three-story main building collapsed (the top floor had housed female patients). When this occurred, the Richmond Home had approximately 100 residents, but over the course of the next six months, some 30 residents died. Although one death was the direct result of collapsing structures during the storm, most of the deaths came about as a result of the increased stress faced by the older persons living in unsanitary cramped conditions following what must have been a traumatic event.

Action taken

Following Hurricane Ivan, a damage assessment of the Richmond Home was conducted. In addition to hurricanes, the study looked at a full range of natural hazards, including earthquakes and torrential rains. The cost of implementing the works recommended by the study was estimated at US$1 million. In the meantime, as an emergency measure, the roof of the main building was replaced to permit female residents to reoccupy the upper floor. Volunteers and military personnel from a neighbouring country, without formal engineering input, carried out the roof replacement. Ten months later, on 13 July 2005, Hurricane Emily (a category 1 event) struck Grenada, causing significant damage to the temporary roof that was in-

stalled after Hurricane Ivan. A post-Emily assessment revealed damage to the roofs of the main building and the physiotherapy room and water damage to floors, walls and electrical distribution systems. When Emily struck, not all of the damage from Hurricane Ivan had been repaired. In particular, the nurses' quarters had not been returned to full use, and the repairs that had been made, were emergency repairs and not intended to withstand future hurricane events. At this point, there was general agreement that future repairs and retrofitting should aim to meet standards for a geriatric home to retain its functionality for the medium term (5 to 10 years). These standards should also be suitable for the long-term alternative use of the facility for other institutional purposes after the geriatric home is relocated to a more suitable site.

Synergy between design, checking and quality control

When repairs began to the Richmond Home in September 2005, a check consultant was recruited to review the design and make recommendations for improvements. The check consultant also was to review the construction quality control procedures and make occasional site visits to see whether the procedures were being followed. Optimally, a check consultant should begin work when a design team is appointed, in order to avoid delays in the review and approval processes and the need to redo much of the work. However, in this case, Grenada's Agency for Reconstruction and Development was well advanced with its work before the check consultant was appointed. And so, when an initial review of the plans revealed that the conceptual design would replicate what was there before Ivan and Emily, it was clear that the drawings were far from complete for construction purposes. No calculations had been presented. The specifications required a great deal of revision. Much information remained to be completed before construction began. Time was becoming a major issue, as the occupants of the Richmond Home needed to be accommodated in safer living quarters as soon as possible. In the best case scenario, there was a clear division of work: the designated engineer was responsible for the design and the check consultant for reviewing it. The checking process involves a degree of assistance, guidance and transfer of knowledge. Indeed, check consultants help develop the construction industry by improving the design process and quality assurance systems. There is a real opportunity for technology transfer in this method of building standards control and the process works best if the designer does his/her part before submitting it for review. During this process the designer may seek information and guidance from the checker but the checker should not become the designer! During the course of construction, the check consultant made four site inspections to review quality control mechanisms, observe the progress of the works, review proposals for works not yet defined in documents and address administrative matters. A little over a year from the time work began, the Richmond Home was re-commissioned, providing a structurally and functionally safe health facility for its vulnerable occupants who are even more at risk in emergency situations.

Lessons learned

1. Repairs made to buildings — particularly critical health facilities — damaged by the effects of natural hazards should aim to meet standards prescribed in current national codes, where these are available. Otherwise, the advice of specialists should be sought regarding appropriate standards.
2. Facilities that house confined or non-ambulatory persons require higher standards of safety than conventional buildings.
3. Check consultants should be employed for all major healthcare work projects. The checking consultant should be an engineer (or engineering firm) with considerable knowledge and experience in designing facilities to withstand natural hazards common to the geographic location of the project. The check consultant should commence work at the same time as the design team and carry out the checks in tandem with the design process.

Annex 2
Considerations for Incorporating the Needs of Older Persons into National Health Disaster Plans

Planning Component	*Considerations for Older Populations*	*Benefits for Disaster Management*
1. Situation Analysis: Information for Planning		
(a) National Health Profile		
• Available health systems and resources	Identify health systems and resources currently in place to specifically address the needs of older persons. Include disaggregated.	Provides an overview of services available for older persons and identifies stakeholders that must be involved in the national health disaster planning process.
• Baseline demographic data	Include disaggregated data by age, sex on the target population (i.e., the national census) to establish a demographic profile of the older population.	Identifies and describes the target/vulnerable population for planning and resource allocation purposes.
• Epidemiological profile of the population	Include health information disaggregated by age, sex, geographical location and health conditions/diseases.	Provides an understanding of the health profile of the older population, which leads to better planning and resource allocation for health services.
(b) Hazards Analysis		
• Historical analysis of national/regional disasters	Review, if available, reports of past disasters and their specific impact on older populations; consult with older persons to obtain first-hand information.	Based on past experiences, this will facilitate prediction patterns and specific targeting of interventions for the older population.
• Mapping of high-risk and vulnerable areas	Obtain or create a hazard map and analyze in relation to the spatial distribution/location of older persons.	A spatial representation of hazards in relation to population distribution identifies higher-risk groups within the wider target population of older persons, such as those in marginalized and remote areas.

Planning Component	*Considerations for Older Populations*	*Benefits for Disaster Management*
(c) Vulnerability Analysis		
• Elements at risk (include power sources and water supplies)	Assess the specific vulnerabilities of older populations including physical, economical and social factors, in relation to the hazards identified as threats.	This will facilitate appropriate and targeted planning and response, especially for those with special needs who may be at greater risk and in need of greater support.
(d) Operational Resources Analysis		
• Health Sector Human Resources	Explore availability (numbers and areas of focus) of human resources to address the needs of older persons. In the absence of trained personnel, assess opportunities for training of staff in the care of older persons, including those with special needs.	A skilled human resource base will ensure a sensitive and targeted response to specific needs and situations.
• Health Sector Infrastructure	Consider safety status of health facilities with regard to disasters and level of accesibility and utility for older persons, including those with special needs.	
2. Objectives and Goals of the Plan	Ensure that the goals and objectives of the national health disaster plan take into consideration the situation and needs of older persons.	Facilitate incorporation of the needs of the target population into the national health disaster plan.
3. Health Sector Coordination		
(a) Authority (b) Emergency Operations Center – Standard Operating Procedures (c) Roles and Responsibilities	Identify a focal point and/or committee to address, coordinate and respond to the needs of older persons.	Formal assignment of roles and responsibilities in relation to older persons at the individual and committee level. This will contribute to improved coordination and collaboration to ensure the needs of older persons are met.
4. External Coordination	Ensure that all entities providing services to older persons are involved in and informed of the plans, which clearly identify the expectations, roles and responsibilities of each entity.	Clarification of expectations, roles and responsibilities of each entity will prevent duplication of efforts and maximize resources.
5. Monitoring and Evaluation	Incorporate the experiences of older persons into the monitoring and evaluation process.	The experience of older persons can be used as a basis of comparison in evaluating the appropriateness of the response for this target group.
6. Training and Education	Incorporate into health disaster training modules that specifically build capacity to address and meet the needs of older persons.	Disaster team members will have the necessary skills to plan and respond to the needs of older persons in advance of a disaster.

Annex 3
Health Disaster Communication and Messaging

Information is the most valuable commodity during emergencies or disasters. It is what everyone needs – individuals and organizations – to make decisions. Above all, it is necessary for rapid and effective assistance for those affected by a disaster.

Disaster-related health communication messages must be:

- Clear – easily understood
- Concise – to the point
- Consistent – give the same or supporting message and never contradict.
- Credible – must be believable and referenced to an authority on the subject.
- A Call to Action – messages must evoke a change in behavior or compliance.

A health disaster communication plan should consider the following:

- Communication objectives – what behavioral changes need to be fostered?
- Audience segments – in this case, older persons. Consider how this group is further segmented, for example, the 'younger' or 'older' old, those with special needs including the visually and hearing impaired, etc.
- Channels of communication – different communication channels will be used to most reach different subgroups of older persons in the most effective manner possible. For example, print material on hurricane preparedness for the visually impaired must be prepared in large print or Braille; TV announcements for the hearing impaired must be closed captioned or use sign language; etc.

Before a Disaster

- **Hazards and their risks** – before a disaster, messages should focus on prevention and understanding of possible consequences of an event. The population needs to know what type of disaster they could face, what the impact could be, and actions they must take to reduce their vulnerability.

  Ensure that the public has reliable and regular access to this information, which will improve their understanding and ownership of the information, hence their response during an event.[17]

- **When to evacuate** – some hazards allow for a warning period, when evacuations are sometimes announced. Ensure that evacuation information reaches older persons, especially those who live alone. For some disasters,

17. Pan American Health Organization. *Information management and communication in emergencies and disasters: Manual for disaster response teams*. 2006.

such as earthquakes or fire, evacuation measures will be spontaneous. When and where to evacuate must be clearly communicated. See more in Part II, Residential Care Facilities, Alert and Evacuations.

During and After a Disaster

During and after the disaster, the population should have access to information that will calm them and inform them about safety measures, always focusing on life-saving actions. While these messages should aim to reduce anxiety and panic, they should not minimize the situation or possible threats.

Immediately after the event that causes the disaster, the messages should focus on protecting health and saving lives. At this time, provide information on the areas affected and support services available (water, power, and health services) for the affected population.

The affected population must have access to information on the following:

- Procedures for searching for missing persons and the location and condition of the injured Practical information on health precautions The availability of mental health services
- Rules for living together and tolerance in emergency shelters Restoration of health services Agencies that can provide assistance, and how they function.
- Information on correct hygiene practices and health care for families and the community.

Key communication messages should include information on:

- Food distribution – information on food distribution systems – distribution days, time and locations. In cases where there will be direct deliveries this should also be communicated to the specific population group i.e. older persons that live alone, those with special needs i.e. wheel chair bound, visually impaired etc.
- Where to seek health care – if the health facilities are operational, this must be communicated. If the health care facilities have had to be set up elsewhere, the new location with directions must be communicated.
- Make and distribute a list of relief and charity organizations and outline what services or assistance they offer.
- Make and distribute a list of credible workmen in the community. This will reduce the risk of fraud.

Information about specific communication messages is included in Part II under the sections on hurricanes and floods, earthquakes and fire safety.

Annex 4
Food and Nutrition Guidelines

A nutritionally sound diet is an important factor in healthy ageing. Malnutrition is a problem among older persons particularly those who are being cared for outside their home (i.e residential facilities or shelters). Special attention must be paid to the nutrition of older persons, as improper nutrition can lead to slower healing of wounds, higher rates of infection and pressure ulcers.

For the purpose of these food and nutrition guidelines, the older population has been divided into three categories: functional older persons, frail older persons and those with chronic diseases. Each of these groups has specific nutritional requirements. Several factors influence the diet, including gender, living conditions, mental and physical state, medications and social support.

- Functional older persons are likely to have nutrient needs that do not vary markedly from those of the healthy younger population, with the exception of a few nutrients.
- Frail older people are likely to have different nutrient needs from the rest of the population and experience an increased likelihood of suffering from under-nutrition. The nutritional implications of frailty include poor appetite, low food intake and involuntary weight loss.
- Older persons with chronic diseases, such as heart disease or high blood pressure, have special dietary requirements to manage the disease. They may also suffer from feeding problems. Therefore, it is important to provide appropriate assistance according to individual needs.

Before a Disaster

- Assess at all levels the special nutritional needs of the older population (national, sub-national and community levels).
- Establish arrangements/memoranda of understanding with suppliers to meet appropriate nutritional needs (national, sub-national and community levels).
- Establish nutrition intervention or community-based support mechanisms (community level).
- Train health staff on how to identify and treat micronutrient deficiencies for older persons. Caregivers and persons who work in shelters should receive training on how to feed older persons.
- Advocate, where possible, for the pre-stocking of non-perishable food supplies that take into consideration the particular needs of the older persons (all levels).

- A general list of food and other supplies for functional older persons in disaster situations would contain:

Beverage	*Breakfast*	*Lunch or evening meal*	*Snacks*	*Other items*
• Water (1 gallon per person per day) • Canned fruit and vegetable juices • Milk (dry, canned, or evaporated) • Instant hot beverages • Powdered drink mixes	• Canned fruit and fruit juice • Ready to eat cereal • Instant oatmeal • Crackers	• Canned beans • Canned meats/ fish (low sodium if available) • Canned vegetables • Canned soups (low sodium) • MREs – meals ready-to-eat	• Canned puddings • High protein drinks/meal replacements • Canned fruit • Comfort foods such as cookies • Travel size condiments	• Can opener • Scissors or knife (for packaged foods) • Disposable plates, bowls, cups, and utensils

During and After a Disaster

- Ensure that arrangements are made to include older persons in priority food groups for distribution of food aid. Distribution points should be easily accessible to the older persons. Where possible, give consideration to a special distribution list and/or have heavy food items (i.e water) delivered to older person who are not in a shelter facility.
- Where possible, involve older persons in food distribution programmes, as they are often important caregivers for other household members.
- Assess the special nutritional needs of the older population, taking into consideration the food-drug interactions.
- Where possible, allow older persons to eat meals with their family members/ friends.
- Use foods that are culturally acceptable. However, if unfamiliar foods have to be distributed due to availability, provide instructions to guide palatable preparation.

Preparation before Feeding

- Ensure that the eating area is well ventilated, with adequate lighting and free from distractions so as to focus concentration and prevent choking.
- Ensure that utensils are clean.
- Take into consideration that plates/bowls and cups may slide (non-slip mat to fix utensils on the table for easier feeding).

- Choose appropriate feeding utensils[18]
  - Spoon and fork with enlarged handles (bind with tape)
  - Bowl with a raised curved lip to allow older persons to 'scoop' the food.
  - Straws or specially designed cups to control the amount and flow of fluids during drinking.

Food Choices

- Consider individual's food preferences, culture, religion and health status (diabetic, low salt and vegetarian diet etc.) during preparation of meals.
- Choose nutritious foods that are easy and safe to swallow.
- Prepare food according to an individual's ability to chew and swallow (i.e., porridge or fluid diet).
- Remove bones and skin from meat to decrease the risk of choking.
- Cut up food into smaller pieces for easy chewing.
- Avoid foods that are sticky and difficult to chew and swallow to prevent choking (i.e., dumplings).

At Meal Time

- Ensure proper positioning-sitting with head slightly flexed and chin down, which reduces the risk of choking.
- Ensure that the individual is fully alert during feeding.
- Ensure proper positioning - sitting with head slightly flexed and chin down which reduces the risk of choking.
- Serve food at the right temperature.
- Do not rush; allow plenty of time for feeding. If an older person refuses to eat, try to find out the reason and provide assistance.
- Observe any signs of swallowing difficulties (i.e., cough, dribbling, aspiration of food back into the nose, etc.). In case of choking or aspiration, keep calm and call for help.
- Ensure adequate fluid intake for older persons who cannot feed themselves to prevent dehydration.

18. Consult an occupational therapist if necessary for advice on the choice of feeding devices. Use smaller spoons or ones with thicker handles to control feeding amount and minimize the risk of choking.

Annex 5
Post-disaster Assessment and Surveillance Forms

Daily epidemiologic surveillance form (symptomatic) (*)[a]

Name of hospital, health care facility, shelter:

_____ _____
Name Location (town/district)

Person completing form: _____

Date:_____

Health status/symptoms										
Signs, symptoms, or conditions	***Age group***									
	<5		5 - 14		15 - 54		55+		Total	Comments
	M	F	M	F	M	F	M	F		
Fever										
Fever and cough										
Fever and urticaria (skin rash)										
Fever and petechiae (hemorrhagic spots on skin)										
Diarrhea										
Jaundice										
Other conditions (name them)										
Injured (*)b										
Deaths (*)b										
Patients with disabilities (*)b										
Patients with chronic illness (*)b										
Other important health information (*)c										

(*) a In shelters, this form is designed for use by non-health personnel with some medical knowledge. The aim is to gather information on a daily basis from shelters and to inform and alert medical personnel responsible for the area about health conditions in the disaster-affected population, and to assist in decision making.
(*) b Write the condition and name of person affected.
(*) c Record only new cases occurring for the day.

Health assessment of adults over 60 years old

Rapid general assessment														
Location/ area	Name of shelter or facility	No. of adults > 60 yrs		No. of adults with special needs				Injured or ill				Deaths		Comments (*) c
				Chronic illness		Functional needs (*) a		Local treatment available		Evacuation needed? (*) b				
		M	F	M	F	M	F	M	F	M	F	M	F	

(*) a Patients with auditory, vision, mobility, or other functional limitations. Provide details under comments.
(*) b Patients who need to be relocated because of injuries, illness, or because treatment is not available.
(*) c Expand on or specify requirements or findings not explained in the table and that will assist in decision making.

Health assessment of adults over 60 years old

Health and Housing														
Location/ Area	Name of shelter or facility	No. living with relatives						Living alone						Comments:
		With chronic illness		With functional limitations (*) a		With special nutritional needs (*) b		With chronic illness		With function-al limita-tions (*) a		With special nutritional needs (*) b		
		M	F	M	F	M	F	M	F	M	F	M	F	

(*) a Functional, auditory, vision, mobility, or other limitations. Provide details under comments.
(*) b Soft diet, low in sodium, sugar, or other special requirements; specify under comments.

Health assessment of adults over 60 years old

Adults Living in Emergency Shelters												
Location/ Area	Shelter or facility	Total population in shelters		Adults > 60 years old in shelters		Adults > 60 years old with chronic illness		Adults > 60 years old with functional limitations		Adults > 60 years old with special nutritional needs		Comments
		M	F	M	F	M	F	M	F	M	F	

Health assessment of adults over 60 years old

Residential Facilities - Infrastructure							
Location/Area	Name of facility	No. of residents			Level of damage		Comments
		Total	M	F	Total (*)[a]	Partial (*)[b]	

(*) a Total damage: irreparable damage.
(*) b Partial damage: not totally destroyed; can be repaired or rebuilt.

Health assessment of adults over 60 years old

Needs of Residents of Residential Facilities								
Location/area	Name of facility	No. of residents with chronic illness		No. residents with functional limitations		No. of residents with special nutritional needs		Comments
		M	F	M	F	M	F	

Annex 6
Mental health and psychosocial support for older persons

Specific mental health services for older adults are not usually available in the Caribbean region. Older persons have a variety of unique challenges that may impact their response to a disaster. These include, but are not limited to: diminished sensory capacity, decreased mobility and physical frailty, income shrinkage and financial limitations, loss of friends and social status, isolation and loss of life-long partners, changes in housing, multiple medications, complex medical problems, ill health, cognitive impairment, and impaired self-care.

The impact of disaster-related losses has shown that older persons often experience a higher incidence of personal loss, injury and death. In addition, existing physical problems with sight, hearing and mobility place older adults at higher risk for physical injury. Research has also shown that older adults are less likely to evacuate, less likely to heed warnings, less likely to acknowledge hazards and dangerous situations, and are much slower to respond to the full impact of losses. A larger proportion of older persons, as compared with younger age groups, have chronic illnesses that may worsen with the stress of a disaster, particularly when recovery extends over months. They are more likely to be taking medications that need to be replaced quickly following a disaster. Reactions of older adults to disasters can include:[19]

- Depression, withdrawal, apathy.
- Decline in physical health; increased physical complaints; worsening of chronic illnesses
- Disorientation, confusion, and memory loss.
- Appetite and sleep disturbances.
- Reluctance to leave home; relocation adjustment problems
- Multiple medication needs
- Despair, apathy, suspicion.
- Anxiety with unfamiliar surroundings.
- Embarrassment about receiving 'handouts.'

The recommendations outlined below offer action points for planners to mainstream the needs of older persons into disaster relief plans and response operations, for shelter managers and for older persons themselves to enhance their coping skills during a disaster.

19. Pan American Health Organization. Mental Health and Psychosocial Support in Disaster Situations in the Caribbean. 2012.

Tips for Planners

Do

- ✔ Ensure that essential post-disaster needs are being met (shelter, water and sanitation, food, health care and other areas) before attempting to provide mental health support.
- ✔ Train primary health care providers to identify and diagnose the most appropriate interventions for mental health problems and disorders in older persons.
- ✔ Educate first responders about the normal and expected emotional responses that older persons may present following a traumatic event. For example, rapid re-establishment of daily routines is essential for older persons, as they may suffer from cognitive difficulties that require simpler and frequently repeated information.
- ✔ Provide the additional attention that older persons may require in terms of receiving clear, consistent and repeated assurances, explanations of what is happening, and directions on what to do.
- ✔ Include in disaster plans measures to ensure mental health hospitals or hospitals with mental health wards receive priority aid survival supplies, have a two-month buffer stock of psychotropic drugs and minimum essential staff attendance.
- ✔ Train family, staff and volunteers on 'psychological first aid.' Volunteers should include older persons.
- ✔ To the extent possible, respect traditional burial practices. Follow the WHO guidelines for the management of dead bodies. (Consult this publication at http://tinyurl.com/8y4zod6.
- ✔ Allow time and space for persons to grieve. Involve religious/spiritual leaders and other social workers in developing psychosocial relief strategies.
- ✔ Include older persons in tracing and family re-unification activities.
- ✔ Facilitate the involvement of older persons in making decisions for prevention and response activities (i.e., caring for children and the disabled; organizing funerals).

Do Not

- ✘ Do not enroll older persons in mental health programs if their other basic reliefs needs are not fulfilled.
- ✘ Do not allow relief organizations to start any psychotropic drug regimens, especially if the drugs are not affordable at local level. Monitor the activities of these groups at all times.

- ✖ Do not encourage relief organizations to provide single counseling sessions or individual and group psychotherapy sessions that may be discontinued before proved healing. Monitor the activities of these groups at all times.
- ✖ Do not encourage new referrals of mental patients to hospitals. Instead, help the family to take care of these persons in the family dwelling.

Tips for Older Persons

Do

- ✔ Participate in planning, simulations and drill activities with your local disaster managers.
- ✔ Learn about/attend a seminar on 'psychological first aid.'
- ✔ Help organize the burial of and/or funerals for the deceased. Respect traditional practices.
- ✔ Identify time and space for grieving, preferably with relatives and other families also affected.

Do Not

- ✖ Do not resist evacuation. Follow others to safe areas when a disaster occurs. Remain with your group to the extent possible.
- ✖ Do not take new medicines for sadness or depression without consulting a local psychiatrist/doctor. Take into consideration whether you are able to afford a continued supply of the same brand at your local pharmacy.

Disasters are stressful situations and older persons may find themselves faced with a variety of unique challenges that contribute to this distress. For example, older persons who previously had lived on their own may find that, in the wake of a disaster, they are dependent on others for food, shelter and the necessities of daily living. Those used to assisted living may face upheaval in their normal routines or a change in their usual caregivers. The stress of the disaster itself can exacerbate stress. Symptoms of stress unique to the older persons include:

- Reliving traumatizing events in their lives that caused severe losses.
- Fear of losing their independence or self-sufficiency.
- Fear of a decline in health and limitations on mobility.
- Worry about limited financial resources, time, and the physical ability to rebuild.
- Fear of being put in an institution.
- Withdrawal and isolation from family and friends.

Psychological First Aid Pocket Guide

Prepare	• Learn about the crisis event. • Learn about available services and supports. • Learn about safety and security concerns.

Action Principles of PFA:

Principle	*Action*
Look	• Check for safety. • Check for people with obvious urgent basic needs. • Check for people with serious distress reactions.
Listen	• Approach people who may need support. • Ask about people's needs and concerns. • Listen to people and help them to feel calm.
Link	• Help people address basic needs and access services. • Help people cope with problems. • Give information. • Connect people with loved ones and social support.

Ethics:
Ethical do's and don'ts are offered as guidance to avoid causing further harm to the person, to provide the best care possible and to act only in their best interest. Offer help in ways that are most appropriate and comfortable to the people you are supporting. Consider what this ethical guidance means in terms of your cultural context.

Do's	*Dont's*
• Be honest and trustworthy. • Respect people's right to make their own decisions. • Be aware of and set aside your own biases and prejudices. • Make it clear to affected people that even if they refuse help now, they can still access help in the future. • Respect privacy and keep the person's story confidential, if this is appropriate. • Behave appropriately by considering the person's culture, age and gender.	• Don't exploit your relationship as a helper. • Don't ask the person for any money or favor for helping them. • Don't make false promises or give false information. • Don't exaggerate your skills. • Don't force help on people and don't be intrusive or pushy. • Don't pressure people to tell you their story. • Don't share the person's story with others. • Don't judge the person for their actions or feelings.

People who need more than PFA alone:
Some people will need much more than PFA alone. Know your limits and ask for help from others who can provide medical or other assistance to save lives.

People who need more advanced support immediately: • People with serious, life-threatening injuries who need emergency medical care. • People who are so upset that they cannot care for themselves or their children. • People who may hurt themselves. • People who may hurt others.

Annex 7
Considerations for Incorporating Older Persons' Needs into the Community Disaster Plan

A community disaster plan is a reflection of the sub-national disaster plan, but specific to the community for which it has been developed. It guides community leadership in appropriate actions for each phase of a disaster. It should address all identified hazards identified that place the community at risk. At the center of this hazard identification is the vulnerability and capacity assessment (VCA). See more in Part II, Recommended Action at the Community Level.

The community disaster plan should be developed in collaboration with all relevant stakeholders, both government and civil society, including older persons and the organizations and groups that work with them. Community leaders will coordinate the development of the plan, with specific responsibilities assigned to a multidisciplinary group or committee set up for that purpose. Community leaders should be trained and supported as they develop their plan and must be able to rely on the technical support of disaster managers at sub-national and national levels so that the plan evolves in an integrated manner.

When individuals and their neighborhoods are prepared to mutually assist each other immediately after a disaster, lives can be saved, property can be spared and emergency services can focus on responding to the most devastated areas. A community plan should be applicable for any type of neighborhood or geographic entity that wants to increase its disaster readiness. Considerations for incorporatins the needs of older persons into community disaster plans, particularly from health perspective; are presented below.

Planning Component	*Consideration for Older Populations*	*Benefits for Disaster Management*
1. Situation Analysis: Information for Planning		
(a) Community Health Profile		
• Baseline demographic data	A community VCA serves to confirm existing national data (e.g. from the national census) and the profile of the community, including the older population. (e.g. number of persons ages 60 – 70, number of males and females, etc.).	This information identifies and/or confirms the make-up of the vulnerable older population in the community (size of families, where they live, livelihoods, cultural practices, etc.). The more detailed the information, the easier it will be to incorporate the needs of older persons in the plan.
• The health profile of population	Ensure that health information is broken down into age/gender health status (disease) to understand the health profile of the older population in the community.	Knowledge of the health situation of the older population in a community helps the community to plan the allocation of resources, etc.

Planning Component	*Consideration for Older Populations*	*Benefits for Disaster Management*
• Available systems and resources	Know what health services and resources are currently in place in the community; what organizations/ groups are working with older persons	This provides a list of stakeholders, especially community-based, that must be involved in the process of developing the plan.
(b) Hazard Analysis		
• Historical analysis of disasters that have impacted the community	The VCA provides an understanding of past disasters and their specific impact on the community, in particular the older population. Older persons in the community itself can be the best source of this information.	This will enable the planners to use the experience of older persons in past disasters to predict patterns (this could include the impact of climate change on the community over the years) and strengthen the preparedness component of the community plan.
• Include hazard map(s) of high-risk and vulnerable areas.	Create hazard maps and analyze in relation to the location of older persons.	A spatial map showing hazards in relation to population distribution in the community identifies higher-risk groups, including the older population, particularly in rural and remote areas.
(c) Vulnerability Analysis		
	Community Vulnerability and Capacity Assessment (VCA) is the basis for developing the community plan. When conducted thoroughly, the assessment will identify the most vulnerable members of the community, including older persons.	Identifies the level of vulnerability of older persons in the community and actions that can be taken before a disaster to mitigate and reduce risk.
• Elements at risk (include power sources, water and sanitation and communication lines)	In relation to potential threats, assess the specific vulnerabilities of older populations in the community. Consider that those with special needs are at greater risk and therefore in need of greater support.	This will allow for a priority listing of who needs the most support in the event that services go down (i.e., older persons living on their own with special needs may be at the top of that list.
(d) Operations & Resources Analysis		
• Human Resources (community nurse, community health workers, community disaster response team (CDRT) members, first aid volunteers, etc.).	Contributes to developing alternatives such as identifying persons at community level with some health training or persons with private transport that can make it available to older persons in need	
• Community Infrastructure (i.e., local hospitals private and public, clinics, health posts, community ambulance)	Helps to identify the nearest health facility for older persons especially older persons with special needs including transportation arrangements	

Planning Component	*Consideration for Older Populations*	*Benefits for Disaster Management*
2. Objectives and Goals of the Plan	Ensure that the goals and objectives of the community plan with regard to older persons are in line with and integrated into the national health disaster plan..	Mitigation activities outlined in the community plan will address one of the most vulnerable groups in the community and contribute to reducing risk before a disaster.
3. Coordination		
(a) Authority (b) Emergency Operations Center – Standard Operating Procedures (c) Roles and Responsibilities	Identify a focal point and/or committee to address, coordinate and respond to the needs of older persons.	Formal assignment of roles and responsibilities in relation to older persons - individual and committee level. This will engender greater coordination and collaboration to ensure the needs of older persons are met.
4. External Coordination	Ensure that all entities at community level involved in any way with providing services to older persons are involved and informed of the plan, which clearly identifies the expectations, roles and responsibilities of each entity.	Clarify expectations, roles and responsibilities of each entity, preventing duplication of efforts and maximizing resources.
5. Monitoring and Evaluation	Incorporate the experiences of older persons into the monitoring and evaluation process.	The experience of older persons can inform planning and improve disaster management for this specific group.
6. Training and Education	Incorporate into disaster training, modules that specifically build capacity to address and attend to the needs of older persons.	Disaster team members will have the necessary skills to plan and respond to the needs of older persons.

Annex 8
Personal Protection and Violence Prevention

People's behavior changes during emergencies, as do the ways in which they express their emotions. Frustration and anguish can foster acts of violence among families, chiefly against women, children, with disabilities. These outbreaks of violence can occur in the home setting, in public places, and in shelters or temporary refuge settings.

In emergency situations, there is often a breakdown of law and order; this leads to an enabling environment for these types of incidents and an increase in the risk of sexual violence, especially against women and children, with a particular increase in the vulnerability of teenage girls. Rape, sexual abuse, involuntary prostitution, and other physical attacks are among the problems that appear or increase during emergencies. Do not underestimate the vulnerability or exposure of older persons to sexual assault and other forms of abuse.

The recommendations for action outlined below, must be considered when planning for disasters and specifically when operating shelters and monitoring security in public spaces during disaster situations.

- Establish a permanent program for the prevention of violence against women, children (including orphans), adolescents, older persons, and physically and mentally challenged persons.
- Include older persons in monitoring safety i.e. friendly reporting of abuses including those threats of sexual nature.
- Provide special training for staff and responders on the prevention of violence against and care for women, children (including orphans), adolescents, the older persons, and physically and mentally challenged persons.
- Develop ongoing community-based violence prevention programmes and activities, which foster the support and participation of official entities, NGOs, churches, the media, and grassroots organizations.
- Prepare and disseminate information, educational and communication material aimed to:
  - Prevent violence both in normal and emergency situations.
  - Inform persons of where they can seek assistance and support services.
- Monitor and record the incidences of violence that occur during an emergency/disaster. Identify the perpetrators of the violent acts (spouses, partners, family members, military personnel, health workers, etc.). Report to responsible authorities (security personnel if available) the types of violence observed, the characteristics of the perpetrators, and personal data and characteristics of the victims.

- Identify high-risk people and subgroups (single women, children (including orphans), adolescents, older persons and physically and mentally challenged persons) and ensure protective measures are implemented in the shelters.
- Determine the steps required to immediately provide medical, legal, psychological, and social assistance needed for the target groups who are victims of violence.
- Establish prevention and priority care activities, in coordination with groups of women and children who have been the victims of violence, and institutions with experience in this area (i.e., sanctuaries for the victims of violence, psychological support services, female medical and police staff, a single registry for filing charges and obtaining legal recourse, etc.).

Gender Based Violence

Minimum package in emergency settings:

- Friendly reporting mechanism for victims.
- Professional counseling
- PEP (Post-exposure prophylaxis for HIV). Optional
- Antibiotics
- Emergency contraception, only exceptionally for women that have not reached menopause.

Older persons also identified personal protection as an area of concern. Because the need for personal protection is often heightened in disaster situations, several recommendations are included in these Guidelines. Living with such fear can reduce the enjoyment of life. Constant media references reinforce the fear. Theft is the most frequent crime against older persons and most thefts take place when a home is empty, as burglars look for 'easy targets.

Precautions

- At night, stay in well lighted areas.
- Carry a flashlight.
- Tell someone where you are going.
- Exercise in pairs or groups.
- Do not display a wallet or money for persons to see.
- Do not leave a purse unattended – keep it close to the body. Do not carry house keys in your purse – carry them separately (for example, around the neck). The best way to avoid purse snatching is do not carry one!
- Lock doors as soon as you get into car.
- Keep purse hidden/out of sight.

- Protect yourself from fraud and financial abuse – even someone trusted can misuse an older person's funds or property through fraud, trickery, theft or force. Some older persons are reluctant to report this type of abuse.

If being followed, do not drive home

- Go to the police station or to a friend.
- Call someone.
- Check gas level before leaving home.
- Do not leave items with your name and address in the car.

At Home

- Be careful about giving out information such as your address if you live alone
- Do not leave or hide keys outside.
- Do not let a stranger in to use telephone, have water, etc.
- Do not leave workmen unattended in the home.
- Ask utility persons for identification.
- Do not divulge your phone number to persons who call—ask them number they want.
- Secure your home—a lock is not lock when not used!
- Have good secure locks on all exterior doors and windows.
- Exterior doors should be solid.
- The yard area should be clearly visible and bushes should be trimmed to avoid potential hiding places.

If Confronted

- Give up money/valuables; it's not worth your life.
- Make note of robbers features – even one such as a facial feature or a scar

When Away

- Make sure the house looks lived-in.
- Do not leave garbage outside
- Ensure newspapers are not left outside. Ask a neighbor to collet them—not the newspaper delivery person.
- Vary the timing of when the lights on and off and if possible, set a radio to turn on and off at different times of the day.

Annex 9
Guidelines for Developing a Personal or Family Disaster Plan

Personal family emergency plans should be kept simple and easy to remember. Consider the following key steps:

- Assemble family members to discuss and develop the plan.
- Examine potential risk scenarios based on the hazard and vulnerability assessment of the community in which you live.
- Check your emergency supplies. Store drinking water in jugs, bottles and cooking utensils Have disaster supplies on hand, including:

  - Water – one gallon per person per day
  - Manual can opener
  - Essential medications
  - Radio – battery operated
  - Cash in small denominations
  - Food – ready to eat or requiring minimal water
  - First aid kit and instructions
  - Flashlight
  - Batteries
  - Copy of important documents and phone numbers
  - Unscented liquid household bleach for water purification
  - Sturdy shoes
  - Warm clothes, a hat and rain gear
  - Extra prescription eyeglasses, hearing aid or other vital personal items
  - Blanket or sleeping bag
  - Large plastic bags for waste and sanitation
  - Personal hygiene items including toilet paper, feminine supplies, and soap
  - Heavy gloves
  - Plastic sheeting, duct tape and utility knife for covering broken windows
  - Any special-need items for children and seniors

- Develop a plan based on risk scenarios, including the following main components:

  - **Information and Communication:** this includes getting information from the authorities and media and internal arrangements within the family and other contacts.

    a. Develop a plan on how the family will communicate with each other, authorities and other contacts during an emergency. Ask a relative or friend in another parish or part of the country to serve as the family's contact. Make sure everyone knows the telephone number of this contact.

    b. In order to maintain, to the extent possible, a link to the outside, keep a battery-operated radio and extra batteries on hand and make sure family members know where the radio is kept. Listen to and follow instructions from the authorities.

    c. Identify family meeting places outside your neighborhood in case you are separated and be sure everyone is clear about these locations.

- **Securing property and other assets**
  a. Teach responsible family members how to turn off the utilities in your home.
  b. Protect your home (roof, windows, doors, etc.) and trim dead branches from trees.
  c. Bring in outdoor objects such as lawn furniture, toys and garden tools; anchor objects that cannot be brought inside but that could be wind-tossed.
  d. Secure your home by installing hurricane shutters or precut plywood.
  e. Turn the refrigerator to the coldest setting if not instructed by officials to turn off utilities.
  f. Fuel your car. Review evacuation routes and gather your disaster supply kit.
  g. Store valuables and personal papers in a waterproof container.
- **Evacuation**
  a. Plan a safe evacuation route and identify safe shelter space within your area. In hurricane situations, those living in storm surge areas, in flood zones, or in less than standard housing should be especially vigilant in preparing disaster plans.
  b. Plan and be familiar with escape routes in case you need to evacuate your home or neighborhood.
  c. If officials order evacuation, leave as soon as possible. Avoid flooded roads and watch for washed-out bridges. Secure your home. Unplug appliances and turn off electricity and the main water valve. If time permits, elevate furniture to protect it from flooding or move it to a higher floor.
  d. Take your pre-assembled emergency supplies and warm, protective clothing
- **Testing the plan** – conducting drills
  a. Test and review the family disaster plan regularly: e.g. conduct fire and hurricane drills, test communication plans, etc.

Annex 10
Health Preparedness for Older Persons

In general, the special health needs of older people are not being adequately addressed in disaster situations. Chronic medical conditions and diseases can rapidly deteriorate, leading to complications and even precipitating death. This situation partly reflects the failure of primary heath care services to take an holistic approach to people's medical, psychological and social needs (an approach that is particularly pertinent to older people, where health and social care issues become increasingly blurred and do not fit neatly into vertical models of provision).

Tips for planners

Do	*Don't*
✔ Ensure that triage and referral for older patients is integrated into the overall medical/ health relief and continuity plan, specifically for: • Dialysis services (generator, filters, minimum staff) • Monitoring sugar levels for diabetics. ✔ Organize patients' groups with a facilitator to coach older patients on healthy lifestyle habits and medication compliance. ✔ Resume home-based care and intensify frequency of visits for patients with restricted mobility. ✔ Ensure at least a two-month stock of drugs for chronic diseases, to facilitate adherence to a drug regimen and to prevent drug resistance issues. Suggested medication priorities include: • Antiseptics and bandages for ulcers • Insulin and other drugs for diabetes • Ant-coagulants • Anti-hypertensive/anti-arrhythmia drugs • Anti-asthmatic drugs • Tuberculosis • Antiretroviral drugs for HIV/AIDS	✘ Do not accept or use unsolicited donations of drugs, drugs labeled in a foreign language, in open or incomplete packaging or close to expiration dates. ✘ Do not permit the introduction of new medications by relief agencies where the generic option is not available and listed on the essential drug list.

Tips for older persons

Do	*Don't*
✔ Have your records and medicines packed in an easy to carry sealed box or plastic bag with clear labels and dosages. Take it with you when seeking health care after a disaster. ✔ Join a patients' group where you can learn from professionals and peers more about how to control your disease and how to obtain support during a crisis. ✔ Store extra devices and items you may need in case of a prolonged disaster, e.g. hearing aids, walking stick, glasses.	✘ Do not take new medications without the advice of a clinician that knows your previous medical history. ✘ Do not ever interrupt or alter medication dosages or schedules unless advised by a doctor.

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