Ministry of Health

GUIDELINES FOR ENSURING CONTINUITY OF NON-COMMUNICABLE DISEASES CARE IN EMERGENCIES

FEBRUARY 2024

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Guidelines for Ensuring Continuity of Care for Non-Communicable Diseases During Emergencies

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ABBREVIATIONS

AED	:	Automated External Defibrillator
BP	:	Blood Pressure
CHP	:	Community Health Promoter
CNS	:	Central Nervous System
CSC	:	County Steering Committees
DKA	:	Diabetic Ketoacidosis
GCS	:	Glasgow Coma Scale
HAART	:	Highly Active Antiretroviral Therapy
HIV	:	Human Immunodeficiency virus
MDAs	:	Ministries Departments and Agencies
PLWSCD	:	Persons Living with Sickle Cell Disease
SCD	:	Sickle Cell Disease
NCDS	:	Non-Communicable diseases
WHO	:	World Health Organization

FOREWORD

Non-communicable Diseases (NCDs) are responsible for approximately 41 million deaths yearly, accounting for 74% of all mortalities globally. Kenya is undergoing an epidemiological transition from predominantly communicable conditions to a double burden of disease characterized by an increasing burden of NCDs, accounting for 41% of all deaths. The first national survey that measured the burden of NCDs in 2015 reported the prevalence of hypertension, overweight, obesity and raised blood glucose. as 23.8%, 19.0%, 8.9% and 1.9%, respectively.

The Constitution of Kenya 2010 mandates the government to provide the highest standard of Health, including access to emergency services as a right for all its citizens. The Kenya Health Policy 2014- 2030, the government's blueprint for achieving this constitutional target, has five out of its six objectives related to the prevention and control of NCD.

Consequently, for the Ministry of Health to build a health system capable of responding effectively to the population's health needs, NCDs cannot be ignored, thus the development of this guideline.

This guideline for ensuring the continuity of care for Non-Communicable Diseases during emergencies is timely and invaluable, having drawn numerous lessons from the COVID-19 pandemic, drought, flooding and famine episodes that have affected the country.

This document aims to provide guidelines that will ensure the seamless provision of effective and standardized services for NCDs and guide the setting up of systems and structures necessary for its implementation in emergency settings.

The Ministry of Health is grateful to those who have contributed to the development of this document. I hope its implementation will enhance our efforts toward reducing NCD-related premature mortalities in line with our national and global commitments.

Dr. Patrick Amoth, EBS
Ag. Director General for Health

PREFACE

The disruptions of the health systems by the COVID-19 pandemic and its impact on people living with Non-Communicable diseases reaffirmed the need to develop robust emergency response systems with critical components of NCD management integrated into them.

NCD complications tend to be exacerbated during emergency situations due to various reasons, such as Interruption of care and the stress imposed by the emergency.

Informed by the rising burden of emergencies and a lack of a structured system to manage them, the Ministry of Health developed and launched the Kenya Emergency Medical Care Policy in 2020. This policy intends to guide the implementation of structured pre-hospital and in-hospital emergency care services.

With the escalating burden of NCDs, it is imperative to develop standard guidelines to guarantee adequate coverage of NCDs in emergency settings.

Implementing these guidelines will ensure all Kenyans have access to comprehensive NCD care during all phases of emergencies.

Dr. Bashir Issak
Ag. Director of Family Health

ACKNOWLEDGEMENT

The Ministry of Health wishes to thank all those who contributed to the successful completion of this document. This was a multi-stakeholder effort with numerous meetings and repeated editions over a lengthy period. We hope that all partners, stakeholders and healthcare workers will adopt and continue to support us in implementing this guideline to ensure the continuity of care for NCDs during emergencies

We appreciate the special support from the office of the Cabinet Secretary, Principal Secretary, Director General for Health, and the Director of Family Health.

We are grateful for the support of the health departments in the various Counties, NCD alliance of Kenya, National Disaster Management Unit, University of Nairobi, MSF Belgium, Kenya Cardiac Society, Private hospitals, private practitioners, local NGOs, Civil Society and patient support groups.

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The launch of this document is not an end in itself but the beginning of a rigorous process to prioritize NCD care in emergency settings.

Dr.Gladwell Gathecha
Ag.Head Division of Non Communicable Diseases

CHAPTER 1: INTRODUCTION

1.0 Background

Non-Communicable diseases (NCDs), including heart disease, stroke, cancer, diabetes, chronic lung disease and sickle cell disease, are responsible for almost 74% of all deaths worldwide. Nearly three-quarters of all NCD deaths, and 82% of the 16 million people who died prematurely or before reaching 70 years of age, occur in low- and middle-income countries (WHO 2022).

NCDs pose devastating health consequences for individuals, families and communities and threaten to overwhelm health systems. The rise of NCDs has primarily been driven by four major risk factors: tobacco use, physical inactivity, excessive use of alcohol and unhealthy diets, as well as genetic factors. The socioeconomic costs associated with NCDs make preventing and controlling these diseases a major development imperative for the 21st century.

The risk factors for NCDs are also increasing in Kenya. According to the STEPwise survey in 2015, about 6.5% of Kenyans (6.3% men; 6.8% women) did not engage in the recommended amount of physical activity, while 94% of Kenyans consume less than the WHO recommendation of five servings of fruits and vegetables a day for most days in a week. About a quarter of Kenyans add salt to their food, while 28% always add sugar to their beverage and 40% use vegetable fat and or saturated fats.

1.1 Emergencies

Emergencies and disasters are a global concern, given their negative impact on lives and livelihoods. Disasters impose serious impediments to development and economic gains through destruction of infrastructure and property, displacement of persons, increased morbidity and mortality and hampering food production and livelihoods. The direct and indirect impacts of emergencies and disasters potentially exacerbate NCDs' severity and disrupt NCD program continuity.

Natural and human-made emergencies, including natural disasters such as floods, droughts, and civil conflicts, have demonstrated devastating health consequences recently, highlighting the importance of comprehensive and collaborative approaches to humanitarian responses and risk reduction. However, the health component of the humanitarian response to emergencies has traditionally focused on managing acute conditions such as trauma and infectious diseases.

1.3 Hazards Profile

Emergencies are caused by hazards and can be categorized as follows;

1. Natural hazards including:
   (i) Biological hazards: zoonoses, epidemics, vector-borne diseases, foodborne diseases, etc.
   (ii) Hydro-meteorological hazards - thunderstorms, tsunamis, hailstorms, coastal storm surges, floods including flash floods, drought, heatwaves and cold spells.
   (iii) Hydrological hazards: floods, landslides
   (iv) Meteorological: extreme weather, storms, extreme temperature
   (v) Climatological: drought, wildfire
   (vi) Geological: earthquake, volcanic activity

2. Human-induced hazards such;
   (i) Technological hazards: industrial hazards, structural failures, transportation accidents, fires and explosions, hazardous materials (chemical, biological, radio-nuclear), food/water Contamination, extreme air pollution, etc.
   (ii) Societal hazards: armed conflict (national, international), terrorism (chemical, biological, radio, nuclear, explosives), election violence, cattle rustling, mass poisoning, displacement of populations (refugees and internally displaced persons), etc.

1.4 Emergencies are typically characterized by;

- Damage to infrastructure – this would include general infrastructure such as power, communication, water supply and health infrastructure.
- The occurrence of physical injuries, including direct traumatic injuries to individuals, often resulting in long-term disabilities.
- Forced displacement of people resulting in loss of access to existing medication and/or assistive devices, loss of prescription, and lack of access to health care services due to displacement leading to prolongation of treatment disruption
- Degradation of living conditions like loss of shelter, inadequate/unsafe shelter in new settlements/camps, shortage of water and regular food supplies, and lack of income, adding to physical and psychological strain.
- Loss or separation from family members resulting in inadequate family support.
- Individuals may experience psychosomatic symptoms. Common psychosomatic symptoms such as chest pain and palpitations must be carefully examined to rule out NCDs or worsening of NCD conditions.

1.5 The link between NCDs and emergencies

There are several ways in which excess morbidity and mortality related to NCDs during emergencies and disasters might occur. Emergencies can lead to an acute exacerbation or a life-threatening deterioration in the health of people with NCDs. This includes:

- Interruption of care: This can occur through the destruction of health infrastructure, disruption of medical supplies distribution and inability to access healthcare providers. Moreover, there could be an interruption of power or safe water. This may lead to life-threatening consequences, for example, among people with end-stage renal failure requiring dialysis.
- A sudden shift in the healthcare system priorities: Infectious disease prevention and control may take precedence over the continuity of treatment for NCD patients.
- The inability of health facilities to operate safely and provide quality care for all patients.
- Disruptions in living conditions resulting in a change in diet and physical activity, often throwing off the delicate balance in diabetic or hypertensive patients.
- Degradation of living conditions: loss of shelter, shortage of water and regular food supplies, and lack of income adding to physical and psychological strain
- People in these settings are almost always stressed, which often elicits physiological responses that are detrimental to NCD control.
- Medication adherence invariably decreases due to disruption in the supply chain and the consequent changes in living habits.
- Physical injuries: direct traumatic injuries can exacerbate NCDs, precipitating acute cardiovascular events, a worsening of chronic respiratory disease and a further deterioration of diabetes control.

1.6 Objectives for NCD management during the initial response to emergencies

In the initial response, during the first 30–90 days of an emergency and especially during the first week, management of NCDs should focus on the treatment of life-threatening or severely symptomatic conditions. This may include persons with, or at high risk of, an acute exacerbation/ complication of their condition (e.g. acute myocardial infarction), those with severe physical suffering (e.g. dyspnea from heart failure) or those for which interruption of treatment could be life-threatening or could cause significant avoidable suffering (e.g. chronic dialysis treatment).

Key actions include:
1. Clinical management: stabilization and/or appropriate referral
2. Identification of the subgroup of NCD patients with special needs for which interruption of treatment could be fatal or critical
3. Avoidance of sudden discontinuation of treatment.
4. Providing basic care at the primary healthcare level for the physical symptoms of advanced NCDs, such as pain and respiratory distress.

1.7 Objectives for NCD management during the continuing response to emergencies

During the recovery phase or protracted emergencies, NCD care should be expanded to include:
1. Management of sub-acute and chronic presentations of previously identified NCDs
2. Ongoing care/follow-up.
3. Palliative care

The specific care for identified or undetected NCD or risk factor is illustrated below:-

Previously identified NCD or risk factor.
1. Ensure access to essential diagnostic equipment, core laboratory tests and medication for the routine and ongoing management of the most common NCDs in the primary healthcare system.
2. Ensure access to essential NCD medication, prioritizing the WHO PEN package (Appendix 1)or the national essential medicines list.

Previously undetected NCD or risk factor
1. Ability of health care services to diagnose and manage the additional burden of new cases, including preventive treatments (e.g. tobacco cessation).
2. Availability of essential NCD medications and technologies recommended in the WHO PEN package or the national essential medicines list.

1.8 Justification for the guideline

Emergencies and disasters have the potential to worsen the severity of Non-Communicable Diseases (NCDs) and disrupt the ongoing provision of NCD services. For example, these crises often lead to the exacerbation of mental health disorders, sickle cell disease (SCD) crises, acute asthma attacks, and hypertensive/diabetic emergencies due to their stressful nature, interruptions in medication access, and the prioritization of other life-threatening conditions, such as trauma.

Furthermore, the disruption of healthcare facilities and population displacement disrupts the ongoing provision of care, adherence to medication regimens, and monitoring, thereby increasing the risk of acute and chronic complications (WHO, 2016). The objective of these guidelines is to facilitate the integration of Non-Communicable Diseases (NCDs) into all phases of emergencies and disasters, ensuring the uninterrupted care of individuals living with NCDs and reducing the risk of mortality, complications, and disability.

1.9 Scope of the guideline

This document offers formal guidance to a wide range of stakeholders, including government entities, healthcare providers, humanitarian organizations, international bodies, development partners, private sector entities, and civil society organizations engaged in the provision of Non-Communicable Disease (NCD) care.

The guidelines underscore the critical importance of integrating the management of NCDs into all phases of emergency and disaster planning and response. This entails the development of disease-specific protocols, the implementation of monitoring and evaluation procedures, ensuring the availability of essential NCD emergency supplies, and addressing various equipment and infrastructure needs.

The diseases covered include cardiovascular diseases, diabetes, cancer, asthma, epilepsy, mental health conditions, sickle cell disease, chronic kidney disease, and the provision of supportive care for cancer patients, including pain management and wound care.

1.10 Alignment with Global, Regional and National Policies and Commitments

The guidelines are aligned with the following documents:

(a) Sustainable Development Goals
(b) Package of essential Non-Communicable diseases interventions for humanitarian settings (PEN-H)
(c) World Health Organization. 2016.NCDs in Emergency settings
(d) Constitution of Kenya
(e) Kenya Health Policy 2014-2030
(f) Kenya National Disaster Risk Management Policy 2017
(g) Kenya Health Sector Strategic Plan 2018-2023
(h) National strategic Plan for the prevention and Management of NCDs 2021/2-2025/6
(i) National action plan for health security
(j) Kenya Public Health Emergency Supply Chain Framework 2021
(k) The Kenya Public Health Emergency Operations Center (KPHEOC) Handbook 2021

The national government, counties, and collaborating partners must establish a cohesive strategy at every tier of healthcare to guarantee the uninterrupted provision of care for Non-Communicable Diseases (NCDs) during emergencies. This approach should include efficient referral systems to prevent unnecessary loss of life and increased health complications. The adoption of an integrated approach, particularly when implemented through primary healthcare facilities, will promote lasting and comprehensive interventions.

In the absence of a functional local health structure, a reliable non-state health service provider should be identified and supported to provide services temporarily. However, there should be a plan that ensures the transition to the public health facilities. The following outlines the role of the National Government, County Governments and partners.

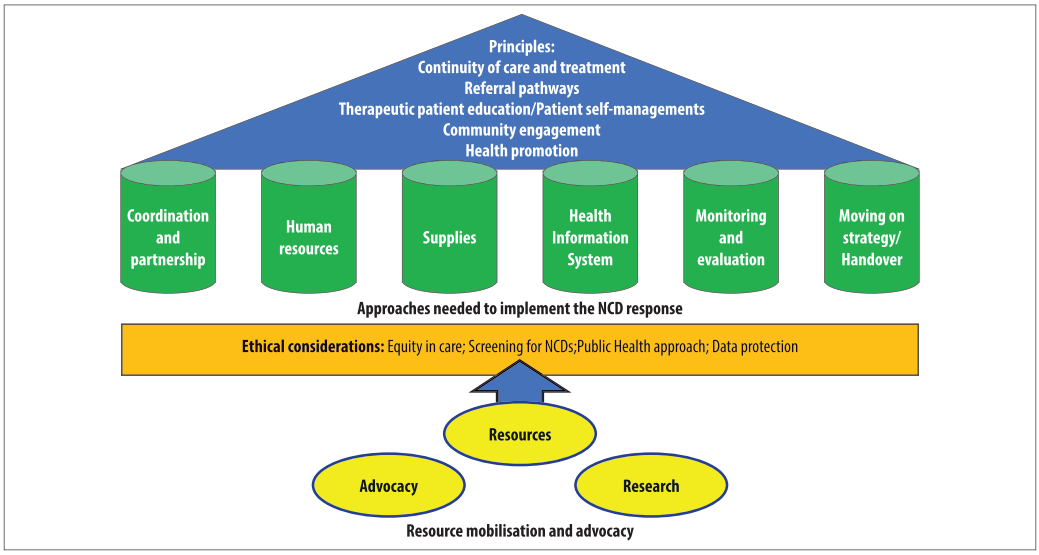

Figure 1:Framework for responders to NCDs in Humanitarian Setting

National level

Governance

This is guided by the Kenya Public Health Emergency Operations Center Handbook

- Strengthen health sector and related state agencies coordination to ensure integration of NCD care for effective preparedness, response and recovery during emergencies.
- Hold coordination meetings with key actors during all phases of emergencies.
- Timely Information sharing and feedback.
- Lead the collaboration of various UN and state agencies for logistical support and recovery.
- Integrate the contingency plan for NCD care during a particular emergency with the broader health contingency plan.

Health Workforce

- Strengthen the capacity of the health workforce on NCD care at all levels to prepare for, mitigate against, respond to and recover from the emergency.
- Establish and update the database/ map of healthcare workforce for NCDs in public and private sector.
- Integrate NCD modules in the training of Emergency Medical Teams

Service delivery

- Regular revision of the minimum package of care for NCDs for emergencies
- Ensure dissemination of clinical guidelines
- Develop health promotion strategies.

Health Information

- Develop and disseminate NCD rapid assessment tools.
- Conduct rapid assessments.
- Strengthen routine data collection and reporting for NCDs during emergencies.
- Monitor and evaluate patient outcomes, comorbidities, the proportion of patients receiving treatment and the overall response to NCDs.
- Include NCDs in sectoral rapid assessment tools.

Health Products and Technologies

This is guided by the Kenya Public health emergency supply chain framework.

- Ensure the availability of essential health commodities, including blood and blood products
- Through KEMSA-ensure the availability of NCD care kits in pre-emergency and emergency phases
- Review and include NCD commodities in the Kenya Public Health Emergency Supply Chain Framework

Finance

- Develop a resource mobilization plan for emergencies.
- Mobilize funds for effective response and recovery (human, financial, health commodities, material)
- Advocate for financial protection of persons living with NCDs during emergencies.
- Advocate for increased government financing for NCDs.

County level

Governance and leadership

This is guided by the Kenya Public Health Emergency Operations Center Handbook

- Ensure representation of NCDs in the County Public Health emergency committee
- Establish effective structures for real-time relay of information.
- Strengthen collaboration and partnership for effective preparedness, response and recovery.
- Effective stakeholder engagement, including the development of an action plan.
- Consolidate the database of healthcare workers, ambulances, and relevant protocols.

Health Work Force

Management of NCDs in emergencies requires a multidisciplinary approach. Clear assigning of tasks should be done, including those to be shared/ shifted between different health care cadres.

- Increase the capacity of the health workforce on NCD care at all levels to prepare for, mitigate against, respond to and recover from the emergency.
- Establish mechanisms for externally sourcing expert staff and specialists should there be a need.
- Conduct regular support supervision.
- Establish and update the database/ map of the healthcare workforce for NCDs in the public and private sectors.

Essential medicines and supplies

This is guided by the Kenya public health emergency supply chain framework.

- Ensure availability and regular access to reliable, affordable medical supplies (i.e. essential medicines, laboratory tests, and medical devices such as glucose meters) to avoid treatment interruption or inappropriate management.
- Coordinate with other agencies providing services to ensure a cold chain system is available.
- In cases where an acute shortage of medicines is anticipated during emergencies, it is advisable to maintain medicine stockpiles at health facilities and provide patients with 'takeaway' kits to prevent treatment

interruptions and potential complications. Steps to consider when stockpiling:

* Assess needs: Identify the specific NCD medicines that are crucial for the affected population during the emergency.
* Determine quantities: Estimate the required quantities of each medicine based on the affected population size, duration of the emergency, and any potential disruptions to the supply chain. Use health facilities registers to estimate this.
* Establish storage facilities: Identify suitable storage facilities that meet the necessary requirements for storing pharmaceutical products. These facilities should have appropriate temperature control, security measures, and inventory management systems to ensure the integrity and safety of the medicines.
* Inventory management- Develop a robust inventory management system to track the stockpile, including expiration dates, batch numbers and storage conditions. Implement first in, first out (FIFO)

Health information system

- Strengthen routine data collection and reporting for NCDs during emergencies. Collect information on cohort size, patient outcomes, and co-morbidities to enable better monitoring of the intervention.
- Patient-held clinical records or a patient passport should be used to promote clinical continuity and systematic care in highly mobile populations and those in insecure settings.
- Conduct rapid assessments.

Service Delivery

- Ensure the availability of effective referral structures.
- Ensure triage and lifesaving care structures and systems are in place.
- Support management of acute complications and exacerbations
- Put measures in place for patient follow-up.
- Ensure the availability of clinical guidelines.

Finance

- Develop a resource mobilization plan for emergencies.
- Mobilize funds for effective response and recovery (human, financial, health commodities, material)
- Advocate for financial protection of persons living with NCDs during emergencies.
- Advocate for increased government financing for NCDs.

Partners

Partners play a key role in ensuring the continuity of NCD care in emergency response. As such, the partners should be involved in the planning for emergency response and mitigation. This will ensure that they complement and support the government's efforts in responding to emergencies through financial, technical, human resources and commodities support.

Partners should link up with the Director General for Health and the County director of Health at the National and County levels, respectively to ensure integration into the emergency response team for NCDs.

CHAPTER 3: MANAGEMENT OF SELECTED NCDS DURING EMERGENCY SETTINGS

General Response to NCDs during emergencies

3.1 Response at the Community Level

(a) NCD coordinator

The NCD coordinator will work closely with the emergency response team.

- Map out all facilities providing care for NCDs during an emergency.
- Develop and disseminate NCD care and health promotional messages through available channels, such as local media.
- Enhance coordination between various stakeholders and mobilize resources.
- Update and disseminate contacts of emergency care providers.

(b) Community Health Promoters (CHPs)

- Map out individuals with known NCDs
- Assist the first responders with the identification of patients with NCDs (HCWs, County governments, security forces, supporting partners)
- Link NCD patients with health facilities, healthcare providers, and support groups
- Identify severe cases (recognition of danger signs) and referring them for further management
- Conduct patient education on self-care
- Disseminate emergency hotline numbers
- Conduct follow-ups of NCD patients
- Conduct community monitoring/community-based surveillance
- Offer psychosocial support.

(c) Persons living with NCDs

- Proactively self-identify to responders, health facilities, CHPs and local administrative offices.
- Provide/display patient passports if available.
- Self-monitoring – danger signs, vitals (BP, Sugars, tremors etc.)
- Attend Patient support group meetings – virtual or physical.
- Keep a list of emergency contacts/hotlines.
- Present patient record card(s) to responders and enforcers

3.1 Response at the Facility Level

- Ensure representation of NCDs in the facility's emergency response committee.
- Establish a dedicated hotline for reporting emergency conditions.
- Prioritize individuals living with NCDs in the delivery of care during emergency situations.
- Follow appropriate guidelines and protocols for managing individuals living with NCDs.
- Maintain clear referral procedures and protocols for severe events.
- Ensure healthcare providers are proficient in emergency protocols and NCD care through capacity-building efforts.
- Compile a list of organizations to contact in case of emergencies.
- Distribute emergency NCD care kits.
- Empower healthcare providers to recognize mental health conditions triggered by the emergency among NCD patients.

3.3 Disease-Specific Emergency Response at the Community and Facility Levels

Diabetes Mellitus

Diabetes is a condition characterized by high blood sugar due to lack or insufficient production of insulin, insulin inaction or both.

The possible emergencies in DM include Hyperglycaemia, diabetic ketoacidosis (DKA), Hyperglycaemic hyperosmolar non-ketotic acidosis (HHA), and hypoglycaemia.

Important considerations for Diabetes in Emergency Setup

1. It contributes to significant morbidity and mortality.
2. Due to its requirement for constant monitoring, it can easily get disrupted in the emergency setup.
3. Special diets are necessary for the care of Diabetes patients; their availability and cost implications should be factored in.
4. Constant need for availability and access to medication for the management of Diabetes.

Response/management at the Community Level

- Identify possible danger signs for high and low blood sugar. This includes dizziness, headache, frequent urination,
- Promote and educate patients on self-care during an emergency.
- Identify and refer severe cases for treatment.
- Patient follow-up.

Management at the Health Facility Level

- Identify and manage patients as per the clinical guidelines.
- Stock a minimum of one-month supply of antidiabetics
- Prescription and refill of drugs
- Referral of severe cases for specialist management.

Chronic Kidney Disease

Chronic kidney disease is a gradual loss of kidney function over time (GFR < 60ml/min for more than 3 months, which may lead to kidney failure. Kidney failure is mainly treated through renal replacement therapy, which includes haemodialysis, peritoneal dialysis and, at times, renal transplant.

Patients with CKD generally present with Swollen limbs, puffiness of the face and excessive urination.

Important considerations for Chronic kidney disease in Emergency Setup

1. It significantly contributes to morbidity and mortality. The lack of access to haemodialysis can be fatal.
2. Consistent hemodialysis treatment (2-3 sessions weekly) carries substantial cost considerations.
3. Ensuring the availability and accessibility of medication is paramount for managing CKD and post-transplant patients.
4. Calls for a specialized skill set at all levels of care.

Management at the Community Level:

- Look out for possible danger signs (Swollen limbs, puffiness of the face etc)
- Refer patients to the nearest facility.

Management at the Health Facility Level:

- Identify and manage CKD patients as per the clinical guidelines and protocols.
- Stock at least one-month supply of CKD control and management medication
- Prescription and refill of drugs
- Referral of severe cases to the next level of care

Cardiovascular Diseases

Important Considerations for Cardiovascular Diseases (CVDs) s in Emergency Setup.

- Cardiovascular conditions can manifest as either acute or chronic.
- Many patients with CVD may initially appear asymptomatic, but they are susceptible to developing complications and cardiac emergencies in the absence of proper treatment.
- Certain CVDs can present as emergencies, and swift, specialized care is essential to prevent fatal outcomes.
- When planning for an emergency response to CVDs, it's crucial to account for individuals requiring chronic or acute care, regardless of whether they exhibit symptoms.

It is imperative to recognize warning signs and ensure appropriate referrals, especially at the community level.

Health facility Level Care

- Ensure the facility is adequately equipped with the necessary equipment in accordance with the National cardiovascular guidelines.
- Facilitate emergency prescription and medication refilling.
- Follow the national guidelines for the management of specific cardiac conditions.)

Examples of Cardiac emergencies

- Hypertensive emergency
- Acute decompensated heart failure
- Stroke
- Acute coronary syndromes

Refer to the national guidelines for the management of cardiovascular diseases for appropriate care.

Cancer

Important Considerations for Cancer in Emergency Setup

- Adverse events have the potential to directly impact patient outcomes and can contribute to higher recurrence rates, especially when treatments are delayed or left incomplete.
- Recognizing and intervening in oncological emergencies is of utmost importance and requires immediate action.
- Emergency situations may call for a change in treatment plans, including the consideration of oral medications or shorter courses of injectable treatments.

- It is crucial to prioritise linkage to palliative care services and home-based care to enhance patient support and well-being.

Support for Patients with Cancer at the Community Level

In emergency situations, the Community Health promoter should:-

- Support the patient in adhering to the prescribed course of care
- Demystify myths and misconceptions regarding patient's diagnosis and management.
- Conduct patient education on common side effects of cancer therapy
- Assist the patient in setting calendar reminders for treatment and follow-up appointments.
- Link the patient and caregivers to the nearest health facility for symptom management and psychosocial support.

Facility Level Interventions

- Sensitize health workers on common oncological emergencies and management of side effects
- Manage oncological emergencies effectively.
- Manage chemotherapy side effects – (Refer to the National Cancer treatment guidelines for management modalities)
- Refer for appropriate care when necessary.

Chronic Respiratory Diseases

Chronic respiratory diseases encompass long-term conditions affecting the airways and various lung structures. These conditions include:

- Bronchial asthma
- Chronic obstructive pulmonary disease (COPD)

Both asthma and COPD may manifest with symptoms such as coughing, breathing difficulties, chest tightness, and wheezing.

Important considerations for chronic respiratory diseases in emergency settings.

- Disasters and emergencies can lead to sudden environmental changes that have the potential to induce asthma attacks and worsen COPD symptoms.
- The repercussions of inadequately managed asthma and COPD, spanning physical, mental, social, and economic dimensions, are amplified among vulnerable populations during emergencies, primarily due to disrupted access to healthcare services.
- Asthma exacerbations can be triggered by intense emotions and anxiety.

(a) Control and Management of Asthma

The goal of asthma control

- To reduce symptoms, optimize exercise capacity and lung function, minimize future risks of exacerbations, and reduce adverse effects of asthma medications.

Community Management

- For persons with asthma, control is likely to be achieved and sustained if they understand the condition and the medications to use when in a stable or unstable state.
- Educate persons living with asthma on how to recognize and manage an asthma flare-up
- The community health promoter should know the exact location of the patient and have a quick and reliable means to access such individuals.

Health facility management

- Refer to the National Asthma guidelines for further management of Asthma

(b) Chronic Obstructive Pulmonary Disease (COPD)

Health facility management

- Refer to the Integrated TB guideline for further management of COPD

When to refer:

- For appropriate care e.g., a patient with respiratory illness not responding to available care, severe or complicated asthma and severe acute exacerbation for COPD not resolving despite treatment.
- For diagnosis and testing e.g., a patient in need of spirometry, PEF measurement, X-ray and or other relevant tests not available in the facility.
- For pulmonary rehabilitation or palliative care.
- For appropriate education and intervention e.g., adherence enhancement, social intervention and appropriate use of inhalers
- Some patients may need to be referred to lower-level facilities nearer home for continuity of care.

Sickle Cell Disease

Sickle cell disease (SCD) is a genetic or hereditary blood disorder of the haemoglobin molecule that forms part of the red blood cell.

SCD results in abnormally shaped sickle cells that can easily be trapped in tortuous small vessels and are quickly removed from circulation by immune

surveillance systems. This causes anaemia and other crises. Several factors can trigger a sickle cell crisis. These include changes in temperature, strenuous exercises, dehydration, and infections.

Important Considerations for SCD in Emergency Setup

- The effective care of sickle cell disease (SCD) demands ongoing monitoring, which can be easily disrupted during emergencies.
- Emergency situations, such as severe weather events, can act as triggers for sickle cell crises.
- SCD management may necessitate specific dietary requirements (such as adequate fluid intake and consumption of green vegetables), which might be challenging to access during emergencies.
- Caring for individuals with SCD may require urgent access to medications, including Hydroxyurea, Folate, Pen V, analgesics and blood products crucial for SCD management.
- Managing SCD necessitates the presence of well-trained personnel at all levels of healthcare provision.

Response/management at the Community Level

Community Health Promoters (CHP) should play a vital role in encouraging and educating patients and their caregivers about self-care practices, which include maintaining proper hydration, using pain relief medications appropriately, and keeping warm.

Management at the Health Facility Level

- Provide appropriate care as per the national guidelines for the management of SCD.
- Institute appropriate referral procedures
- Ensure availability of essential medicine for the management of SCD.
- Establish a sickle cell registry

Mental Health

Mental health refers to our emotional, psychological and social well-being. It helps determine how we relate to others, make choices and handle stress. Mental health is important at every stage of life, from childhood to adulthood.

Mental, neurological (Epilepsy) and substance use (MNS) disorders are highly prevalent, accounting for a large burden of disease and disability globally.

During emergencies, populations are particularly susceptible to developing mental health problems, both in the immediate and recovery phases of the emergency.

Psychiatric Emergencies

These refer to events whereby an individual presents with marked disturbances in thought, mood and/or action. This may severely distress the individual or others and may escalate to sudden disability or death. The emergencies thus require immediate management. Psychiatric emergencies may become more common during emergency situations.

Health workers can diagnose and manage common psychiatric emergencies.

Common Psychiatric Emergencies

- Suicidal attempt, deliberate harm to self or others
- Acute psychotic episode with excited/aggressive behaviour and violence. Sometimes, they may be associated with depressive episodes.
- Alcohol & drug withdrawal syndrome & delirium tremens
- Stupor
- Acute stress reaction
- Epilepsy
- Panic disorder with panic attacks.
- Adverse side effects due to psychotropic drugs.
- Escape of a patient

Interventions at the Community Level

Some basic steps that can be taken to help people suffering from psychological distress during emergencies may include:

1. Assess the risk of suicide or harm to self or others.

   If you suspect that someone may be in danger of self-harm, it's important to take the following steps:

   - Do not leave the person alone.
   - Seek immediate assistance from a mental health professional.
   - Attempt to limit the person's access to any means they could use to harm themselves.
   - Endeavor to prevent the person from further alcohol or drug use.
2. Where possible, listen to that person without judgement.
3. Encourage the person to get appropriate help.
   - Encourage the person to see a professional mental health worker so that he can be assessed and put on treatment if need be.
   - The mental health and Psychosocial services are available in all the County Hospitals.
4. Where necessary, refer to the nearest health facility.

Management of Psychiatric Emergencies at the Facility

Assessment

History and Examination– Obtain a detailed history and carry out a thorough physical examination to rule out other causes, such as head injury (Glasgow Coma Scale)

Mental Status Examination - Do a mental state examination to determine the level of mental functioning. Assess suicidal or homicidal intent as soon as possible. Formulate psychiatric diagnosis. Rule out any pre-existing psychiatric disorders. Determine overdose or withdrawal of drugs and or alcohol.

Mental State Examination

Appearance and behaviour: this looks at levels of consciousness, dress, psychomotor activity, and cooperativeness.

Rapport: quality and quantity of speech e.g. pressured, coherent etc.
Mood: subjective, objective, perceptions, hallucinations and such

Cognitive Functions

Attention and concentration: Normal/ impaired. Orientation to time, Place, Person: Normal/ impaired.
Memory: Immediate: Normal/impaired, Recent: Normal/impaired.
General information and intelligence: Adequate/ inadequate.
Judgment: Intact/impaired.
Insight: Present/Absent.

General Management

Table 1: General Management

Secure the safety of patient:	As patients are at high risk for suicide and violence, health workers should always take appropriate measures to prevent them. Keep family as an attendant if available. Otherwise, mobilize hospital staff or other patients to closely observe the patient or restrain them.
Nutrition and hydration:	Patients are at high risk of dehydration and starvation due to self-neglect. Therefore, health workers should ensure that patients receive adequate hydration and nutrition.
Psycho-social support:	Educate the patient and family about the illness and your plan of management so that they understand the disorder and cooperate with you.
Medication	To be given as per the need
Investigation:	Do investigation as needed.
Notification	Inform the patient's family, hospital administrator or other agencies as necessary.
Inform	Police if the case is medico-legal
Consult a senior colleague	If in doubt
Refer if necessary	After giving psychological first aid and medical treatment.
Criteria for Involuntary Treatment in Consultation with Patient's Family	Unlike patients with physical disorders, psychiatric patients pose a unique challenge as many do not accept treatment or admission to a hospital due to a lack of insight. Nevertheless, the following conditions warrant treatment: • Presence of a mental disorder (as defined by internationally accepted standards) and in need of treatment. • Loss of insight and unable to provide for own basic needs. • Serious likelihood of immediate or imminent danger to oneself (suicide) or to others (homicide).

REFERENCE

1. Government of Kenya (GOK). (2009). National disaster management policy (Final draft). Retrieved from http:// ochaonline.un.org/ OchaLinkClick.aspx?link=ocha&docId=1160523

2. World Health Organisation. 2022. Non Communicable Diseases Progress Monitor

3. Ministry of Health Kenya. 2016: Steps survey for NCD risk factors

4. World Health Organisation. 2016: Non-Communicable Diseases in Emergency settings

5. Parry, Simon & Hannaford, Jamie & Lloyd-Hughes, Benjamin & Prudhomme, Christel. (2012). Multi-year droughts in Europe: Analysis of development and causes. Hydrology Research. 43. 689-706. 10.2166/ Nh.2012.024.

6. The Kenya Public Health Emergency Operations Center (KPHEOC) Handbook 2021

7. Kenya Public Health Emergency Supply Chain Framework 2021

8. World Health Organisation 2009: Mental Health

APPENDICES: APPENDIX 1

List of Essential Medicines and Technologies

CORE LIST OF MEDICINES	CORE TECHNOLOGIES	TECHNOLOGIES WHEN RESOURCES PERMIT
Thiazide diuretic	Thermometer	Nebulizer
Calcium channel blocker	Stethoscope	Pulse oximeter
	Blood pressure measurement	Blood cholesterol assay
Loop Diuretics	Device	Lipid profile
Beta-blocker	Measurement tape	Serum creatinine assay
Angiotensin converting	Weighing machine	Troponin test strips
Enzyme inhibitor	Peak flow meter	Urine microalbuminuria
Oral glucose lowering agents	Spacers for inhalers	Test strips
Anti-angina/ Vasodilators	Glucometer	Tuning fork/ Monofilament
Bronchodilators	Blood glucose test strips	Electrocardiograph (if trained to read and interpret)
Analgesics	Urine protein test strips	Echocardiograms
Anticonvulsants	Urine ketones test strips	Defibrillator
Steroids		Ophthalmoscope
Sympathomimetics		Suction Machine
Anticoagulant		Ambu Bag.
Antihistamine		
Laxative		
Antibiotics		
Dextrose infusion		
Glucose injectable solution		
Sodium chloride infusion		
Oxygen		

ANNEX 2: NEEDS ASSESSMENT

Needs assessments and analysis Information on NCDs should be integrated into general needs assessments and should include the following.

Community and Facility

- Demographics of affected population (age, gender, sociodemographic etc.)
- NCD burden in the affected population (i.e. type of NCDs and respective prevalence)

Facility

- Health system infrastructure and services for the delivery of NCD care
- General access to health services and barriers (cost, distance, security, legal)
- Available services for NCD patients, i.e. qualified staff, medicines and supplies, diagnostics at primary and referral levels
- Existing national NCD guidelines and essential drug lists
- NCD medicines and supplies procurement and supply systems
- Patient records, registers, Health information system and inclusion (or not) of NCDs
- Actors involved in NCD care (local and international)

ANNEX 3: MINIMUM DATA REQUIREMENTS

Level of collection	Type of system	Indicators
Pre emergency		
Health facilities and community health promoters should use the existing MOH data collecting systems to collect data on NCDs such as: 1. MOH 705A and B 2. MOH 740 – Diabetes and Hypertension 3. Cervical cancer screening registers 4. Diabetes and Hypertension patient files 5. Diabetes and Hypertension permanent register 6. Diabetes and Hypertension Daily register 7. SPICE data collection platform 8. Electronic community health information system		
Emergency Phase		
Patent level	A patient file	
Clinic Level	Registers held at the facility	
Program level	1. An electronic database for operational use 2. WHO Hospital Emergency Response Checklist 3. Service Availability and Readiness Assessment	
Post Emergency Phase		
Strive to establish data and surveillance systems as per the pre-emergency stage		

ANNEX 4: SUICIDE SCALE

Pierce Suicide Intent Scale for use after a suicide attempt.

Circumstances Score	
Isolation	(0) Someone Present (1) Someone nearby or on telephone (2) No-one nearby
Timing	(0) Timed so intervention possible (1) Intervention unlikely (2) Intervention highly unlikely
Precautions against rescue	(0) None (1) Passive (eg alone in room, door unlocked) (2) Active precautions
Acting to gain help	(0) Notifies friend/helper (1) Contact friend/helper, doesn't tell (2) No contact with friend/helper
Final acts in anticipation	(0) None (1) Partial preparation (2) Definite plans (eg will, insurance, gifts)
Suicide note	(0) None (1) Note torn up (2) Presence of Note
Self Report Score	
Lethality	(0) Thought would not kill (1) Unsure if lethal action (2) Believed would kill
Stated intent	(0) Did not want to die (1) Unsure (2) Want to die
Premeditation	(0) Impulsive (1) Considered for <1 hour (2) Considered for <1 day (3) Considered for >1 day
Reaction to act	(0) Glad recovered (1) Uncertain (2) Sorry Unsuccessful
Medical Risk Score	
Predictable Outcome	(0) Survival Certain (1) Death unlikely (2) Death likely
Death without medical treatment	(0) No (1) Uncertain (2) Yes
Total= ☐ **/25**	☐

Total score <4 = low risk; 4-10 medium risk;>10 high risk

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