



NATIONAL PUBLIC HEALTH INSTITUTE OF LIBERIA

- Preventing and Controlling Public Health Threats-

RESEARCH AGENDA

2021-2025

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Foreword

It cannot be overemphasized that public health and medical research are vital to the scientific advancement of animals, human wellbeing, and the environment. Lessons learned from the 2014 Ebola outbreak have provided an opportunity for Liberian researchers to develop research agendas that probe into the prevention, treatment, and control of diseases. Moreover, with the recent COVID-19 pandemic, there is a growing interest amongst researchers to research emerging and re-emerging diseases.

Since the inception of the National Public Health Institute of Liberia (NPHIL) in 2015, NPHIL has conducted several public health and medical research amongst other scientific research, some independent and others in collaboration with National and International partners. However, research conducted in the past has not been guided to some extent by a clear, comprehensive scientific integrity policy in the conduct of research.

Recognizing the need to strengthen medical and public health research in Liberia and recognizing the significance of research in the development of the country, the National Public Health Institute of Liberia (NPHIL) has developed this National Public Health and Medical Research Agenda (NPHMRA) document that identifies priority areas of Public Health and Medical Research for Liberia over the next five years (2021 – 2025). This policy document aims at strengthening evidence-based decision-making, thereby providing the necessary technical support to inform relevant policies of the Liberian government and recognizes the different responsibilities of partners, researchers, research institutions, employers, employees, donors, and other stakeholders involved in research initiatives including the acquisition of research findings or data, conception of research, its implementation, evaluation, and publication of research findings. This document also sets research priorities that are of interest to local and international stakeholders. These research areas cover predictive, promotive, and preventive.

I uphold the principle that research should be governed by a wide range of ethical, moral, legal, professional practice and standards. This policy document calls for the consciousness of ethical practice by researchers, their respective institutions, and all other bodies involved in facilitating or implementing research including but not limited to employers, funders, and research permit granting institutions especially in areas such as those of preparation of research proposals, data acquisition, processing, reporting, and dissemination.

Therefore, I call upon all institutions, national and international partners, and stakeholders engaged in conducting or facilitating research to observe the ethical requirements recommended by this policy document.

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Acronyms

NPHMRA:	National Public Health Medical Research Agenda
EVD:	Ebola Virus Disease
COVID-19:	Coronavirus Disease 2019
NPHIL:	National Public Health Institute of Liberia
MOH:	Ministry of Health
IDs:	Infectious Diseases
NCDs:	Non-Communicable Diseases
NTDs:	Neglected Tropical Diseases
MOU:	Memorandum of Understanding

1.0 INTRODUCTION

Evolving from the 2014 Ebola epidemic, significant interest has been generated in conducting research in Liberia. Furthermore, the COVID-19 pandemic has triggered considerable interest into investigating new emerging and re-emerging pathogens of public health concern. This has led to building both institutional and individual research capacity in Liberians to conduct public health and medical research related studies, while at the same time focusing on collaborations with international research partners to conduct research. Nevertheless, research being conducted in Liberia has largely not been guided by a well-developed national research agenda which highlights priority diseases, supports the strengthening of local and international collaborations, and encourages evidence-based public health and medical practice, and policy formulation. Such clearly articulated agenda is important for directing the infusion of research resources that can serve to further develop and expand public health and medical research in Liberia.

Realizing the need to strengthen medical and public health research in Liberia, and recognizing the significance of research in the development of the country, National Public Health institute of Liberia (NPHIL) has developed this National Public Health and Medical Research Agenda (NPHMRA) document which identifies priority areas of Public Health and Medical Research for Liberia over the next five years (2021 – 2025). This is geared towards strengthening evidence-based decision-making, thereby providing the necessary technical support to inform relevant policies of the Liberian government and other stakeholders. This document also sets research priorities that are of interest to local and international stakeholders. These research areas cover predictive, promotive, and preventive.

Whereas the Government of Liberia recognizes the variety of requirements and interests of various partners in public health and medical research, partners are urged to guarantee that

research in Liberia addresses the research priorities listed in this document throughout implementation. Partners are encouraged to take active steps to undertake and support research in the areas highlighted as priorities and the government of Liberia encourages all partners to assist the implementation of the National Public Health and Medical Research Agenda.

2.0 OBJECTIVES OF THE NATIONAL PUBLIC HEALTH AND MEDICAL RESEARCH AGENDA

2.1 General Objective

To provide direction and coordination in terms of public health and medical research priorities for Liberia to the research community, which includes academic institutions, local and international research institutions, policy makers and other stakeholders.

2.2 Specific Objectives

- Ensure the conduct public health and medical research that aligns to the research priorities for Liberia
- Promote local and international collaborations in the conduct of public health, and medical research
- Support the coordination of public health and medical research activities to minimize duplication and optimize synergies
- Support the strengthening of local capacity and development of Liberian scientists in the area of public health and medical research
- Utilize research findings for evidence-based healthcare practice and policy formulation

3.0 METHODOLOGY AND PROCEDURES

The principles of empirical evidence, partners participation, country-led involvement, and openness informed the selection of research priorities. The primary activities that were carried out as part of the overall process were as follows:

3.1 Criteria for Setting Priorities

The major criteria that were used to evaluate each of the indicated priorities are as follows:

1. The existing and likely disease burden
2. Practicability and effectiveness of the research considering the proposed human, financial and technological resources
3. The acceptability and justifiability of the research

4.0 RESEARCH AREAS OF PRIORITY

The research priorities outlined below remain critical to the implementation of programs to strengthen disease epidemiology, diagnostics, prevention and treatment. The priority areas of public health and medical research in Liberia have been selected on the basis of:

1. Prevailing and probable diseases, conditions, and events public health or medical research importance
2. Practicability, relevance and suitability of the research work
3. Potential of the research to inform healthcare-based practice and /or health policy
4. Anticipated effect of the research on decision-making and policy formulation, minimization of disease burden, impact on public health and health-care services, and benefits for future research projects.

5. Impacts on equality and human rights to guarantee that the interests of vulnerable and underprivileged populations are taken into account.

6. Benefit to the development and strengthening of Liberia's scientific capacity

4.1 Infectious Diseases

Research into the diagnosis, prevention, and treatment, including novel diagnostics, medications, and vaccinations for the below listed infectious diseases. This includes epidemiological, observational and health policy research into social, economic, cultural, environmental, ecological aspects.

- HIV and AIDS
- Malaria
- Acute Bloody Diarrhea (Shigella)
- Acute Flaccid Paralysis (AFP)
- Dengue Fever
- Ebola Virus Disease (EVD)
- Human exposure to Rabies
- Lassa Fever
- Maternal Deaths (due to pregnancy related infections)

- Measles
- Meningitis
- Monkey pox
- Neonatal Deaths

- Neonatal Tetanus
- Severe Acute Watery Diarrhea (Cholera)
- Yellow Fever
- SARS-Cov-2

4.2 Neglected Tropical Diseases

Epidemiological investigations focusing on the transmission ability of vectors, research into insecticide resistance and vector control, impact of drug administration and other interventions and control programs, studies on the effects of some NTDs on immunity against other concurrent infections and effectiveness of vaccines and research into the burden of below listed NTDs and enhancing diagnostic capacity.

- Buruli Ulcer
- Tuberculosis (TB)
- Yaws
- Dracunculiasis (Guinea worm)
- Trypanosomiasis (Sleeping sickness)
- Leishmaniasis
- Lymphatic filariasis
- Onchocerciasis (river blindness)
- Schistosomiasis
- Helminthiases
- Taeniasis
- Scabies

4.3 Non-communicable diseases and Injuries

Research to assess the efficacy of community-based and clinical interventions, barriers across evidence and healthcare practice, and studies to measure physical and functional abilities and wellbeing within populations. Additionally, examining the role of alternative medicine in the prevention, treatment and control of NCDs.

Studies into occupation injuries and illness, epidemiology of employment-related injuries and identification of vulnerable groups.

- Cancer
- Cardiovascular disease (CVD)
- Diabetes and other metabolic diseases
- Chronic respiratory disease (CRD)
- Mental health conditions including epilepsy
- Road traffic injuries
- Occupational injuries

4.4 Conditions and Events of public health concern

- Maternal and Neonatal deaths
- Unexplained cluster of health events
- Unexplained cluster of deaths
- poison
- Flooding
- Fire incident
- Chemical spill

- Pollution
- Exposure to radiation

5.0 IMPLEMENTATION AND COMPLIANCE WITH THE NPHMRA

The National Public Health Institute of Liberia, in collaboration with the Ministry of Health and with the cooperation of local, international research partners and stakeholders, will work to ensure complete compliance and full implementation of the NPHMRA. All efforts will be directed towards achieving the objectives of the NPHMRA to ensure prioritization, advancement and proper coordination of research activities in Liberia.

International researchers and research partners shall include Liberian researchers and scientists in the design and implementation of research studies conducted in line with this agenda. Additionally, the role of institutions participating in any research studies shall be acknowledged in final publications and NPHIL's authorship policy shall be completely adhered to when writing articles for publication of research findings.

All research partnerships will be established through signing of a memorandum of understanding (MOU).

5.1 Monitoring Compliance

NPHIL shall ensure monitoring and compliance to the NPHMRA by local and international research institutions.

5.2 Agenda Revision

The NPHMRA aligns with the NPHIL's strategic plan and will be reviewed and updated after a period of five years. A midterm review may however be conducted, as may be prompted by

evolving health related issues and the level of research partners' adherence to the Agenda's implementation.

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