



**CORE COMPETENCIES REFERENCE MANUAL
FOR PUBLIC HEALTH TECHNOLOGISTS TO
PRACTISE IN ZAMBIA**

CORE COMPETENCIES AND MINIMUM STANDARDS

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QUALIFICATIONS AND RESPONSIBILITIES

Title of the programme: Diploma in **Public Health or its equivalent**
Key accountability for the job: Public Health and Primary Health care

Primary roles and responsibilities:

- Provision of promotive and preventive health care services
- Carry out healthcare service leadership and management functions

1.0. INTRODUCTION

The Health Professions Council of Zambia (HPCZ) is a statutory body that was established by the Health Professions Act No. 24 of 2009. The Act renames and continues the existence of the Medical Council of Zambia established by the Medical and Allied Professions Act of 1977. The Health Professions Act No. 24 provides for the registration of health practitioners and regulation of their professional conduct; provides for the licensing of health facilities and the accreditation of health care services provided by health facilities; and provides for the recognition and approval of training programmes for health practitioners.

Following the issuance of the guidelines for introduction of licensing examinations for health professionals registered with the Health Professions Council of Zambia, this bulletin provides an outline of the core competencies for registrants who have completed the diploma in public health technology seeking non-specialist registration as public health technologists in Zambia.

2.0. EXIT EXAMINATIONS AND AWARD OF THE DIPLOMA IN PUBLIC HEALTH BY TRAINING INSTITUTIONS

Training institutions, private or public, approved by the Health Professions Council of Zambia are mandated to examine and graduate their students under their own seal and authority as prescribed by the HPCZ act number 24 of 2009. The Diploma in Public Health is also designated as a pre-service diploma qualification for the Bachelor of Science degree in Public Health. Accordingly, a holder of this qualification will be required to take and pass the HPCZ licensing examination to qualify for registration with the Council as a health practitioner.

3.0. LICENSURE EXAMINATIONS BY THE HEALTH PROFESSIONS COUNCIL OF ZAMBIA

A person shall not practise as a health practitioner, unless that person is registered as a health practitioner in accordance with the Health Professions Act No. 24 of 2009. In the exercise of its functions under this Act, the 2nd Council and the 3rd Council of the Health Professions Council of Zambia instituted Licensure Examinations to help maintain standards given the emergence of multiple private and public training institutions. This “Bulletin of Information on the Core Competencies for the Licensing Examinations for Public Health Technologists to Work in Zambia” binds all parties regulated under this Act. The examination fees for licensure examinations, are payable to the Health Professions Council of Zambia as part of the eligibility to sit licensing examinations.

The HPCZ Licensing Examination assesses a Public Health Technologist’s ability to apply knowledge, concepts, and principles, and to demonstrate fundamental client- and community-

centered skills, that are important in health and disease and that constitute the basis of safe and effective public health practice. The HPCZ Licensing Examination includes, but is not limited to, theoretical and practical examinations which complement each and the other components. No component is a stand-alone in the assessment of readiness for public health practice in Zambia. The candidate will be assessed under three domains, namely:-

- Knowledge
- Skills
- Attitude.

The above domains will be assessed by means of a theory exam comprising multiple choice questions followed by a practical examination.

The seven main **subject areas** (assessed under all three learning domains) for Public Health Technology in Zambia are:

1. Introduction to public health concepts
2. Epidemiology and Biostatistics
3. Health Systems Research
4. Health Promotion and Education
5. Disease Control
6. Health management and leadership
7. Health Ethics, Communication Skills and Professionalism

Other subject areas prescribed by the curriculum such as Introduction to Public Health, Health Systems Management and Leadership will only be assessed as cognitive domain in the theory paper. The overall expected outcomes of the Public Health licensure examination is to ensure that the candidate will meet the minimum expectations for the role as a front line health worker in the primary health care setting

4.0. CURRICULUM & COMPETENCE OUTCOME GUIDELINES

The curriculum must identify attributes in each educational domain (knowledge, skills and attitude) and present them to guide student learning and assessment by examiners. HPCZ directs public health practitioners to be compassionate and empathetic in caring for clients and the community to be trustworthy and truthful in all their professional dealings. Public health practitioners have a responsibility to respect and provide services that are up to standard for the health of the individuals and the community.

5.0. CORE COMPETENCE OUTCOME GUIDELINES

The core competence reference manual must identify attributes in each educational domain (knowledge, skills and attitude) and present them to guide the LEX candidate preparations and assessment by examiners. HPCZ directs all health practitioners to be compassionate and empathetic in caring for patients and to be trustworthy and truthful in all their professional dealings. Public health technologists have a responsibility to respect and provide care that is up to standard for the lives and health of the individuals and population that are entrusted into their care. The expectations are largely in four overall outcome areas which are further specified into three major competence domains.

Core Competencies

1. Disease Control

2. Epidemiology and Biostatistics
3. Health Systems Research
4. Health Promotion and Education
5. Environmental and Community Health
6. Healthcare Management and Leadership
7. Health Ethics, Communication Skills and Professionalism

CORE COMPETENCIES: PUBLIC HEALTH PRACTITIONER

DOMAIN	COMPETENCY	COMPETENCY STATEMENT	SUB COMPETENCIES
KNOWLEDGE	PUBLIC HEALTH, EPIDEMIOLOGY, BIOSTATISTICS, HEALTHCARE MANAGEMENT & LEADERSHIP KNOWLEDGE	The candidate should demonstrate knowledge of the Public Health science, principles and practice relating to Disease Control, Epidemiology and Biostatistics, Health Systems Research, Health Promotion and Education, Environmental and Community Health, Management and Leadership, Health Ethics, Communication Skills and Professionalism	<ol style="list-style-type: none"> 1. Demonstrate knowledge of health management information system and its application to health planning, budgeting , resource allocation, human resource management, personnel motivation 2. Demonstrates knowledge of basic communication skills in health 3. . 4. Demonstrates basic knowledge of epidemiological principles and concepts, 5. Applies sociological, behavioural and anthropological principles and concepts in working with the community 6. Interprets results of a given epidemiological and bio-statistical analysis
	Disease Control		<ol style="list-style-type: none"> 1. Demonstrates basic understanding of public health principles and concepts 2. Demonstrates understanding of public health surveillance systems 3. Demonstrates knowledge of outbreak investigation 4. Demonstrates understanding of disease control strategies to address diseases of

			public health importance
	Epidemiology and Biostatistics		<ol style="list-style-type: none"> 1. Demonstrates basic knowledge of epidemiological concepts and principles in Public Health Practice including disease occurrence and distribution 2. Demonstrates knowledge of epidemiological study designs 3. Demonstrates knowledge of biostatistical data analysis and results presentation using excel and SPSS/STATA
	Health Promotion and Education		<ol style="list-style-type: none"> 1. Demonstrates knowledge of health promotion principles, concepts and practice 2. Demonstrates knowledge of basic health behavior change to promote individual and population health
	Health Systems Research		<ol style="list-style-type: none"> 1. Demonstrates knowledge of research proposal development in health systems research 2. Demonstrates basic knowledge of report writing in health research 3. Demonstrates knowledge of health research proposal design

	MANAGEMENT AND LEADERSHIP		<ol style="list-style-type: none"> 1. Demonstrates knowledge of management functions including health planning, budgeting and resource allocation in healthcare institution 2. Demonstrates knowledge of project management 3. Demonstrates knowledge of the health management information system
	HEALTH ETHICS, COMMUNICATION SKILLS AND PROFESSIONALISM		<ol style="list-style-type: none"> 1. Demonstrates professional ethics and practice in relation to health equity and accountability. 2. Demonstrates knowledge of communication strategies in interactions with colleagues, superiors and clients
	ENVIRONMENTAL AND COMMUNITY HEALTH		<ol style="list-style-type: none"> 1. Demonstrates knowledge of occupational safety and health in relation to workplace environment 2. Explains control and preventive
SKILLS	DISEASE CONTROL		<ol style="list-style-type: none"> 1. Conduct public health surveillance 2. Use public health surveillance data to recognize disease outbreaks 3. Participate in multi-disciplinary teams on outbreak investigation 4. Participate in designing and implementing disease control strategies 5. Participate in preventive and control programmes for communicable and non-communicable diseases including HIV, TB, diarrhea, cardiovascular and kidney diseases, diabetes, hypertension, alcohol and drug abuse and mental illness

1. Skills	EPIDEMIOLOGY AND BIostatITICS		<ol style="list-style-type: none"> 1. List different types of epidemiological study designs 2. Conduct basic data analysis, presentation and interpretation of results using Excel and SPSS
	Health Promotion and Education		<ol style="list-style-type: none"> 1. Conduct community diagnosis in monitoring community health status 2. Conduct promotive and preventive public health programs and activities 3. Provide promotive and preventive mother and child health services including growth monitoring, immunizations, antenatal and post-natal care services 4. Provide youth friendly health services including information on male circumcision
	Health systems Research		<ol style="list-style-type: none"> 1. Outline steps for developing a health research protocol following standard guidelines 2. Develop basic data collection tools for appropriate epidemiological research designs
	Health management and Leadership	•	<ol style="list-style-type: none"> 1. Use health management information system and apply to health planning, budgeting , resource allocation, human resource management, personnel motivation 2. Conducts and attends integrated stakeholder meetings on public and environmental health issues

			<ol style="list-style-type: none"> 3. Plans and conducts different approaches for assessing, preventing and controlling communicable diseases of public health importance 4. Perform basic managerial roles in order to effectively run a public health programme
	HEALTH ETHICS, COMMUNICATION SKILLS AND PROFESSIONALISM		<ol style="list-style-type: none"> 1. Communicates effectively with colleagues, superiors, clients and the community 2. Outlines basic principles and values of Health Care Ethics
5. Attitude and values	Professionalism	Graduates must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, & sensitivity to a diverse client population	<ol style="list-style-type: none"> 1. Networks with other stakeholders in the provision of appropriate community health care services 2. Collaborates with local authorities in executing public health functions 3. Applies managerial knowledge and skills in order to effectively run a public health programme. 4. Uses correct legal procedures when taking actions as well as defending legal proceedings. 5. Plans ,implements, manages and evaluates health projects and programmes 6. Mobilizes resources for health projects and services 7. Collaborates and networks, with relevant stakeholders for various public health projects and services 8. Promotes health behavior change to improve individual and population health 9. Lobbies for good policies in public health care

			delivery 10. Promotes public health surveillance and control strategies in responding to diseases of public health importance 11. Recognises , investigates and participates in control of disease outbreaks 12. Participates in disaster management and mitigation 13. Makes recommendation for appropriate methods of waste management 14. Demonstrates knowledge of data analysis and results presentation using excel
			15.
	Systems-Based Practice	Graduates must demonstrate ability to work in larger context multi-disciplinary teams & system of public health	1. Demonstrates knowledge of leadership approaches 2. Performs basic management functions in public health institutions and multi-disciplinary teams

7.0 BLUEPRINT WEIGHTS BY COMPETENCIES

COMPETENCY	WEIGHTS
1. Public Health knowledge	60%
2. Public Health Practice	40%

8.0 CORE PROCEDURES (LIST NOT EXHAUSTIVE)

The following procedures are the minimum standards and a full list could be found in the curriculum

Common Procedures in Public Health	Perform community diagnosis
	Outline essential steps involved in disease outbreak investigation
	Participate in collecting disease surveillance data
	Apply various excel and SPSS in the analysis, presentation and interpretation of epidemiological and research data
	Participate in the management and control of disease outbreak
	Design health research proposal
	Perform basic management functions including organising, planning, monitoring, coordinating and controlling
	Prepare timely Public Health Reports

9.0 REFERENCES (TEXT BOOKS)

Competency	Competency Description & Subject Areas	Reference Materials and Resources
Competency 1: Scientific Knowledge	<ul style="list-style-type: none"> The LEX candidate should demonstrate basic knowledge in Public Health in relation to Social Determinants of Health, Nutrition, Epidemiology, Biostatistics, Applied Health Research Methods, Health Promotion, Health Planning, Health Policy and Management, Disease control strategies and Population Health 	<ul style="list-style-type: none"> Teutsch SM, Churchill RE, (2000). <u>Principles and Practice of Public Health Surveillance</u>, 2nd ed. New York, NY: Oxford University Press, Sim J and Wright C. (2000). <u>Research In Health Care, Concepts, Designs and Methods</u>. Stanley Thornes [Publishers] Ltd 1. Ewles and Simnett (1996). <u>Promoting Health</u>, London, Bailliere Tindall GRZ (2000). <u>National Gender Policy</u>, Lusaka, Government Printers. Hubley J (1993). <u>Communicating Health</u>, London, MacMilla Naidoo J and Wills J (1994). <u>Health Promotion</u>, London, Bailliere Tindall Ministry of Finance and National Planning (2002). <u>Transitional National Development Plan, 2002-2005</u>.. Lusaka. : Bossert, T, Chitah, MB, Simonet, M, Mwansa, L, Daura, M,

<p>Competency 2: Skills and core competencies</p>	<ul style="list-style-type: none"> • The candidate should be able to integrate and perform basic public health and scientific principles and practice 	<p>Mabandhala, M, Bowser, D, Sevilla, J, Beauvais, J, Silondwa, G, and Simatele, M. (2000). <u>Decentralization of the Health System in Zambia. Major Applied Research 6, Technical Paper No. 2., Partnerships for Health Reform Project, Abt Associates Inc.: Bethesda, MD.</u></p> <ul style="list-style-type: none"> • Cook. G and Zumla. A (ed) (2003). <u>Manson’s Tropical Diseases.</u> London. Book Power. • Lucas. O.A and Gilles H.G (2003). <u>Short Textbook of Public Health; Medicine for the Tropics.</u> London. Book power • Adetokumbo O.L (2004). <u>Short text Book of Public Health Medicine for the tropics (4th Edition).</u> New York: Oxford University Press Inc.
<p>Competency 3: Attitude and values</p>	<ul style="list-style-type: none"> • The candidate’s demonstration of professional attitudes in relation to the science and practice of public health 	<ul style="list-style-type: none"> • World Health Organisation, (1992). <u>ICD 10 classification of Mental and Behavioural disorders” Oxford, Oxford University Press.</u> • Wood C.H, Vaughan J.P (1997). <u>Community Health (2nd Edition).</u> Nairobi: AMREF. • Giesecke.J (2002). <u>Modern Infectious Disease Epidemiology.</u> London. Arnold • Howard, A.G (2002). <u>Water Supply Surveillance: a reference manual.</u> Leicestershire, WEDC, Southborough University • <u>Institute of Water and Sanitation Development (2001). Waste water and Excreta Disposal Systems: Course material.</u> Harare, IWSD publications. • Timothy O’Riordan (ed) (2000), <u>Environmental Science for Environmental Management;</u> 2nd edition, Pearson Education Ltd, England. • Keeling Ralph, (2000). <u>Project Management: An international perspective;</u> Newyork, Palgrave. • Young L.Trevor (2006). <u>Successful project Management;</u> London Koganpage, • <u>Wayne W. Daniel (2010). Biostatistics, Basic concepts and methodology for the Health sciences, 9Th edition.. ISBN: 978-0-470-41333-3.</u>

		<ul style="list-style-type: none">• Kenneth J. Rothman (2012). Epidemiology an introduction. 2nd edition. ISBN: 978-0-19-975455-7.
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