

Cancer Epidemiology and Control Training Course

Professional Development Training Course Outline

Category	Public Health	Duration	5 Days
Base Fee	\$1,500 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

Cancer remains one of the leading causes of morbidity and mortality globally, demanding robust cancer epidemiology, strengthened public health surveillance, and evidence-based cancer control strategies. Cancer Epidemiology and Control Training Course equips participants with in-depth knowledge of cancer burden analysis, risk factor profiling, and screening program evaluation, while emphasizing the role of data-driven decision-making in improving cancer prevention and treatment outcomes. Through a One Health lens and a strong foundation in epidemiological methods, participants gain practical competencies in analyzing cancer trends, designing intervention programs, and applying global best practices for cancer prevention and control.

This course integrates modern cancer research techniques, biostatistical tools, and health systems strengthening approaches to empower professionals involved in oncology, disease surveillance, and non-communicable disease (NCD) control. Participants learn to interpret cancer datasets, evaluate early detection initiatives, monitor treatment outcomes, and design equitable and sustainable cancer control programs. Through case studies, applied learning, and hands-on sessions, learners will develop advanced competencies needed to address the evolving cancer landscape at community, national, and global levels.

Programme Curriculum

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5 days

Course Objectives

1. Understand global and regional **cancer epidemiology trends** and burden estimates.
2. Apply **epidemiological study designs** to assess cancer risk factors and outcomes.
3. Strengthen skills in **cancer data analytics**, biostatistics, and interpretation.
4. Evaluate **cancer screening programs** for effectiveness and equity.
5. Apply **GIS mapping** for cancer burden visualization and hotspot analysis.
6. Conduct **surveillance and monitoring** of cancer incidence and mortality.
7. Use **evidence-based strategies** to develop cancer prevention interventions.
8. Assess **behavioral and environmental determinants** of cancer risk.
9. Integrate **health systems approaches** to strengthen cancer care pathways.
10. Develop **policy briefs** and advocacy materials for cancer control.
11. Utilize **digital health technologies** for cancer surveillance and reporting.
12. Analyze **survivorship, palliative care, and quality of life** indicators.
13. Evaluate emerging **precision medicine and genomics** trends in cancer control.

Organizational Benefits

1. Improved capacity for **data-driven cancer control planning**.
2. Strengthened institutional **cancer surveillance systems**.
3. Enhanced ability to design **effective cancer prevention programs**.
4. Better evaluation of **screening and early detection strategies**.
5. Increased adoption of **digital health and analytics** tools.
6. Enhanced staff competencies in **research and epidemiology**.
7. Improved collaboration with **public health agencies** and cancer centers.
8. Greater efficiency in **resource allocation** for cancer interventions.
9. Strengthened organizational policy and **advocacy capabilities**.
10. Increased readiness to respond to **emerging cancer challenges**.

Target Audience

1. Public health officers
2. Epidemiologists
3. Oncologists and oncology nurses
4. NCD program managers
5. Health data analysts
6. Cancer registry officers
7. Policy makers and health planners
8. Medical researchers
9. NGO and community health program coordinators

Course Modules

Module 1: Introduction to Cancer Epidemiology

- Definitions, concepts, and scope of cancer epidemiology
- Global and regional cancer burden and trends
- Key data sources: GLOBOCAN, IARC, WHO
- Cancer transition and demographic changes
- **Case Study:** Global cancer epidemiology—Africa vs. Europe

Module 2: Epidemiological Study Designs in Cancer Research

- Cohort, case-control, cross-sectional studies
- Measures of association: OR, RR, hazard ratios
- Bias, confounding, and effect modification
- Study protocol development
- **Case Study:** Using case-control studies in lung cancer research

Module 3: Cancer Risk Factors and Determinants

- Behavioral (smoking, alcohol, sedentary lifestyle)
- Environmental (pollution, radiation, carcinogens)
- Genetic and hereditary predispositions
- Social determinants and inequities
- **Case Study:** Cervical cancer determinants in Sub-Saharan Africa

Module 4: Cancer Screening and Early Detection

- Principles of cancer screening
- Screening methods for breast, cervical, colorectal cancers
- Program implementation and evaluation

- Equity and access in screening initiatives
- **Case Study:** HPV screening programs in low-income settings

Module 5: Cancer Surveillance & Registries

- Role of population-based cancer registries
- Data collection, coding, and classification (ICD-O)
- Monitoring incidence, survival, and mortality
- Quality assurance and registry sustainability
- **Case Study:** Setting up a national cancer registry

Module 6: Cancer Prevention & Control Strategies

- Population-level prevention strategies
- Risk reduction and health promotion
- Tobacco control, vaccination, and lifestyle modifications
- Integrating cancer prevention into primary healthcare
- **Case Study:** National cancer control programs (NCCP)

Module 7: Treatment Outcomes, Survivorship & Palliative Care

- Treatment monitoring indicators
- Evaluating improvements in survival rates
- Survivorship care plans
- Palliative care models and access
- **Case Study:** Palliative care implementation in rural regions

Module 8: Innovations, Digital Health & Precision Medicine

- Genomics and targeted therapies
- AI and machine learning in cancer prediction
- Digital tools for screening and patient monitoring
- Tele-oncology applications
- **Case Study:** Using AI to detect early breast cancer

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.

- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

- The participant must be conversant with English.
- Upon completion of training the participant will be issued with an Authorized Training Certificate
- Course duration is flexible and the contents can be modified to fit any number of days.
- The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- One-year post-training support Consultation and Coaching provided after the course.
- Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
21 Sep 2026	25 Sep 2026	Online	\$1,000
21 Sep 2026	25 Sep 2026	Physical	\$1,500
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0

Start Date	End Date	Location	Price
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21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0

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