Health Survey Design 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

Health Survey Design is a cornerstone of modern public health intelligence, epidemiological research, and data-driven healthcare planning. In an era defined by digital health transformation, real-time surveillance systems, and evidence-based policy making, the ability to design accurate, reliable, and scalable health surveys is critical for governments, NGOs, research institutions, and global health agencies. Health Survey Design Training Course equips participants with advanced competencies in survey methodology, sampling techniques, questionnaire design, field data collection, and health data analytics, ensuring high-quality insights for decision-making in both routine and emergency health contexts.

With the rapid rise of AI-driven health analytics, mobile data collection tools, DHIS2 integration, and population health monitoring systems, professionals must master structured approaches to collecting and interpreting health data. This course bridges theoretical foundations with practical applications, enabling participants to design robust health surveys that align with WHO standards, Sustainable Development Goals (SDGs), and global disease surveillance frameworks. Learners will gain hands-on experience in building scalable survey instruments, minimizing bias, and ensuring data validity in complex health environments.

Programme Curriculum

Health Survey Design Training Course

Introduction

Health Survey Design is a cornerstone of modern public health intelligence, epidemiological research, and data-driven healthcare planning. In an era defined by digital health transformation, real-time surveillance systems, and evidence-based policy making, the ability to design accurate, reliable, and scalable health surveys is critical for governments, NGOs, research institutions, and global health agencies. Health Survey Design Training Course equips participants with advanced competencies in survey methodology, sampling techniques,

questionnaire design, field data collection, and health data analytics, ensuring high-quality insights for decision-making in both routine and emergency health contexts.

With the rapid rise of AI-driven health analytics, mobile data collection tools, DHIS2 integration, and population health monitoring systems, professionals must master structured approaches to collecting and interpreting health data. This course bridges theoretical foundations with practical applications, enabling participants to design robust health surveys that align with WHO standards, Sustainable Development Goals (SDGs), and global disease surveillance frameworks. Learners will gain hands-on experience in building scalable survey instruments, minimizing bias, and ensuring data validity in complex health environments.

Course Duration

5 days

Course Objectives

By the end of this training, participants will be able to:

1. Apply epidemiological survey design principles for public health research
2. Develop structured health data collection frameworks aligned with SDGs
3. Design AI-assisted digital health surveys using modern platforms
4. Implement robust sampling techniques (random, stratified, cluster sampling)
5. Construct validated questionnaires for population health studies
6. Apply biostatistics fundamentals in health data interpretation
7. Use mobile-based data collection tools (ODK, KoboToolbox, DHIS2)
8. Ensure data quality assurance and validation in field surveys
9. Reduce sampling bias and non-response errors in health research
10. Integrate real-time health surveillance and reporting systems
11. Conduct community-based health needs assessments
12. Analyze health indicators for policy and decision making
13. Strengthen data-driven healthcare planning and predictive analytics

Target Audience

1. Public Health Officers
2. Epidemiologists and Biostatisticians
3. NGO and Humanitarian Health Workers
4. Government Health Planners and Policymakers
5. Medical Researchers and Academics
6. Data Analysts in Health Informatics
7. WHO/UNICEF/Global Health Program Staff
8. Graduate Students in Public Health and Medicine

Course Modules

Module 1: Fundamentals of Health Survey Design

- Principles of public health surveys
- Types of health surveys (cross-sectional, cohort, longitudinal)
- Role in epidemiology and surveillance systems
- Ethical considerations in human data collection
- Introduction to WHO survey frameworks

- **Case Study:** COVID-19 rapid assessment survey design in urban populations

Module 2: Sampling Techniques in Health Research

- Probability vs non-probability sampling
- Cluster and stratified sampling methods
- Sample size calculation techniques
- Reducing sampling bias in field studies
- Household and population sampling strategies
- **Case Study:** National malaria prevalence sampling survey

Module 3: Questionnaire Design & Instrument Development

- Structuring health questionnaires
- Closed vs open-ended question design
- Scaling methods (Likert, ordinal, categorical)
- Translation and cultural adaptation
- Pilot testing and validation
- **Case Study:** Maternal health survey instrument in rural clinics

Module 4: Digital Health Data Collection Tools

- Introduction to ODK and KoboToolbox
- Mobile-based data entry systems
- Offline data collection strategies
- Integration with DHIS2 systems
- Real-time data synchronization
- **Case Study:** Immunization tracking using mobile survey tools

Module 5: Biostatistics for Survey Analysis

- Descriptive and inferential statistics
- Data cleaning and preprocessing
- Regression and correlation analysis
- Confidence intervals and hypothesis testing
- Visualization of health data
- **Case Study:** HIV prevalence trend analysis in adolescent populations

Module 6: Data Quality Assurance & Validation

- Data reliability and validity checks
- Error detection techniques
- Field supervision and monitoring
- Data consistency frameworks
- Audit trails in health datasets
- **Case Study:** Eliminating duplicate entries in national health surveys

Module 7: Health Surveillance Systems & Reporting

- Real-time disease surveillance systems
- Integration with national reporting frameworks
- Early warning health systems

- Dashboard creation and reporting tools
- Outbreak detection mechanisms
- **Case Study:** Ebola outbreak surveillance system in West Africa

Module 8: Advanced Health Analytics & Policy Application

- Predictive analytics in healthcare
- AI and machine learning in survey data
- Health policy formulation from data insights
- Population health trend forecasting
- Decision-support systems in healthcare
- **Case Study:** Predicting diabetes prevalence using national survey datasets

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

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. 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
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com