Datastat Research
Building Capacity in Training and Research

DATASTAT TRAINING IN

OFFICIAL COURSE PROSPECTUS

Center for Advanced Research & Professional Development

Nairobi Training Center • Global Virtual Academy • Corporate On-Site

PUBLIC HEALTH

Vector Control Strategies Training Course

Comprehensive Course Syllabus, Practical Modules & Upcoming Schedules

PROGRAM SPECIFICATIONS & HIGHLIGHTS

DURATION
5 Days Practical Hands-on

DELIVERY MODES
In-Person Class & Live Virtual

CERTIFICATION
Accredited Certificate of Completion

INTAKES / DATES
Multiple Cohort Schedules Included

PREPARED FOR:

Valued Participant

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Academic & Professional Training Year: 2026

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Vector Control Strategies Training Course

Public Health • 5 Days Intensive • Accredited Certification

Course Overview

Vector Control Strategies Training Course is designed to equip public health professionals, environmental health officers, and disease surveillance teams with cutting-edge, evidence-based, and sustainable vector control techniques.

Key Skills & Software Tools Covered

Pest management • Disease vector surveillance • Environmental control methods

Upcoming Training Schedules

Confirmed cohort intakes and venues. Both physical in-person classroom and live virtual online seats are available.

TRAINING DATES	LOCATION / VENUE	FORMAT / DURATION	INVESTMENT (FEE)
11 May 2026 – 15 May 2026	Nairobi	Classroom / 5d	**$1,500 USD / KES 110,000**
11 May 2026 – 15 May 2026	Kigali	Classroom / 5d	**$3,000 USD / KES 110,000**
11 May 2026 – 15 May 2026	Dubai	Classroom / 5d	**$5,000 USD / KES 110,000**
11 May 2026 – 15 May 2026	Cape Town	Classroom / 5d	**$4,500 USD / KES 110,000**
11 May 2026 – 15 May 2026	Addis Ababa	Classroom / 5d	**$3,000 USD / KES 110,000**
11 May 2026 – 15 May 2026	Singapore	Classroom / 5d	**$5,000 USD / KES 110,000**
11 May 2026 – 15 May 2026	Istanbul	Classroom / 5d	**$5,000 USD / KES 110,000**
11 May 2026 – 15 May 2026	Bangkok	Classroom / 5d	**$5,000 USD / KES 110,000**
11 May 2026 – 15 May 2026	Accra	Classroom / 5d	**$4,000 USD / KES 110,000**
18 May 2026 – 22 May 2026	Nairobi	Classroom / 5d	**$1,500 USD / KES 110,000**
18 May 2026 – 22 May 2026	Kigali	Classroom / 5d	**$3,000 USD / KES 110,000**
18 May 2026 – 22 May 2026	Dubai	Classroom / 5d	**$5,000 USD / KES 110,000**

* Corporate discounts and customized cohort scheduling are available for teams of 3 or more participants.

Course Curriculum & Modules

Vector Control Strategies Training Course

Introduction

Vector-borne diseases remain a major global public health challenge, driven by climate change, rapid urbanization, poor sanitation, and increased human mobility. Diseases such as malaria, dengue fever, chikungunya, Zika virus, and yellow fever continue to strain health systems, particularly in tropical and subtropical regions. Vector Control Strategies Training Course is designed to equip public health professionals, environmental health officers, and disease surveillance teams with cutting-edge, evidence-based, and sustainable vector control techniques. The course integrates integrated vector management (IVM), GIS-based surveillance, entomological monitoring, insecticide resistance management, and climate-sensitive disease forecasting to strengthen outbreak prevention and response systems.

With increasing global emphasis on One Health approaches, climate resilience, and data-driven disease control, this training builds competencies in modern vector control innovations including biological control agents, larval source management, digital epidemiology, and community-based interventions. Participants will gain practical skills in planning, implementing, and evaluating vector control programs aligned with WHO standards and national public health frameworks. The course emphasizes real-world application through case studies, simulation exercises, and field-based learning to enhance operational readiness and impact at community and national levels.

Course Duration

5 days

Course Objectives

- Understand Integrated Vector Management (IVM) frameworks and global best practices
- Apply mosquito surveillance and entomological monitoring techniques
- Analyze vector-borne disease transmission dynamics and epidemiology
- Implement insecticide resistance management strategies
- Design climate-smart vector control interventions
- Utilize GIS mapping and spatial analysis for outbreak tracking
- Strengthen community-based vector control programs
- Apply larval source management (LSM) techniques effectively
- Evaluate biological and chemical vector control methods
- Integrate One Health approaches in vector management systems
- Conduct risk assessment for vector-borne disease outbreaks
- Improve data-driven decision-making in public health surveillance
- Develop sustainable and eco-friendly vector control policies

Target Audience

- Public Health Officers
- Environmental Health Practitioners
- Epidemiologists and Disease Surveillance Officers
- Laboratory Technicians (Entomology focus)
- NGO and Humanitarian Health Workers
- Ministry of Health Program Managers
- Urban Planning and Sanitation Officers
- Researchers in Vector-Borne Disease Control

Course Modules

Module 1: Foundations of Vector Biology and Ecology

- Life cycle of mosquitoes, ticks, and flies
- Environmental determinants of vector breeding
- Disease transmission mechanisms
- Vector classification and behavior patterns
- Case Study: Malaria transmission ecology in Sub-Saharan Africa

Module 2: Integrated Vector Management (IVM)

- Principles of IVM strategy
- Multi-sectoral coordination approaches
- Policy and governance frameworks
- Sustainability in vector control programs
- Case Study: National IVM implementation in Sri Lanka

Module 3: Surveillance and Monitoring Systems

- Entomological surveillance techniques
- Disease outbreak early warning systems
- Digital reporting tools and mobile surveillance apps
- Data collection and interpretation
- Case Study: Dengue surveillance system in Singapore

Module 4: Chemical and Biological Control Methods

- Insecticide application techniques
- Larvicides and adulticides usage
- Biological agents (larvivorous fish, bacteria)
- Environmental safety considerations

- Case Study: Bacillus thuringiensis israelensis (Bti) program in India

Module 5: Insecticide Resistance Management

- Mechanisms of resistance development
- Resistance testing protocols
- Rotational insecticide strategies
- Policy guidelines for resistance control
- Case Study: Pyrethroid resistance in West African malaria vectors

Module 6: GIS and Digital Vector Surveillance

- Spatial mapping of disease outbreaks
- Remote sensing and climate data integration
- Predictive modeling for vector hotspots
- Mobile data collection systems
- Case Study: GIS-based malaria mapping in Kenya

Module 7: Community Engagement and Behavior Change

- Community-led total sanitation (CLTS)
- Risk communication strategies
- Health education campaigns
- Stakeholder participation models
- Case Study: Community dengue control program in Brazil

Module 8: Climate Change and Emerging Vector Risks

- Climate variability and vector expansion
- Urbanization and breeding site proliferation
- Emerging and re-emerging vector diseases
- Adaptation and mitigation strategies
- Case Study: Expansion of Aedes aegypti in Europe

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@datastatresearch.org or call +254724527104

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 DATASTAT CONSULTANCY LTD account, as indicated in the invoice so as to enable us prepare better for you.

Certification & Learning Methodology

- Hands-on practical delivery with real-world datasets, case studies, and lab exercises.
- Post-training mentorship, access to class resources, and customized follow-up support.
- Participants who successfully complete the course receive an accredited Datastat Certificate of Completion.

How to Enroll & Reserve Your Seat

1. Online Registration: Visit https://datastatresearch.org/courses/vector-control-strategies-training-course to register online.
2. Email Booking: Send participant details to training@datastatresearch.org for official invoice & reservation.
3. Support & Assistance: Inquire via phone +254 724 527 104 | +254 734 969 612.