

Concept Note

Regional Vector Control Training for WASH and Health Staff

Event	Regional Vector Control Training
Date	1 st September 2025– 5th September 2025
Location	Nairobi
Venue	Nairobi, Kenya – Hosted by Kenya Red Cross Society
Participants	• Kenya RC (Hosting) – Health – 1, WASH -1 • Ethiopia RC – WASH -1 • Somalia RC - Health – 2 – two coordinating offices • South Sudan RC - WASH-1 • Sudan – WASH - 1 • Uganda RC- WASH-1 • Zimbabwe RC – Health -1 • Nigeria RC – WASH-1 • Sierra Leone RC – Health-1 • Ghana RC – WASH-1 • Burundi RC – Health -1 • Zambia RC - WASH-1 • Tanzania – WASH – 1 • Liberia – Health - 1 • IFRC– 3 participants - Regional Coordinator – Emergency Health- 1, WASH-1, HDCC unit-1 • Partner National Societies – 3 participants • ICRC – 2 Participants • WHO - 2, • IOM- 2, • MSF – 2, • OXFAM – 1 • UNHCR - 2 • Dutch Disaster Risk Reduction and Surge Support – DRRS - 1 Total – 34 participants Note: The Africa National Societies to confirm the selected participants through the internal National Societies' selection process ICRC, WHO, IOM, MSF, UNHCR, DRRS, and PNS have confirmed participation and will cover their respective travel and accommodation costs
Overall Objective	This training aims to empower Red Cross WASH and Health staff in African countries to design and implement effective, contextually appropriate vector-borne disease control programs. By enhancing local capacity in surveillance, intervention planning, and coordination, it directly supports the IFRC's Health and Care Framework 2030, strengthens National Societies' leadership and operational readiness in evolving crises, and advances the localisation agenda by enabling "as local as possible" humanitarian responses aligned with regional strategic priorities

Context and Background

Africa has experienced an alarming surge in natural and biological disasters over the past decade, severely impacting human lives, livelihoods, and development gains. Between 2011 and 2025 (data up to May 2025), a staggering 221.57 million people were affected by extreme weather events, more than the combined totals from the preceding two five-year periods (2011-2015 and 2016-2020). Disaster-related deaths have also skyrocketed, reaching 28,759 in 2021-2025, over three times the number recorded in 2016-2020. Droughts have been the most pervasive hazard, affecting over 81% of those impacted between 2021 and 2025, while floods and storms also accounted for significant numbers. This escalating trend is largely attributed to climate change, which exacerbates the frequency and intensity of events like prolonged droughts in the Horn of Africa and devastating floods across West and East Africa¹.

Furthermore, vector-borne diseases, such as malaria and dengue, remain a critical public health concern, disproportionately affecting the continent's poorest populations. The changing climate is also promoting the spread of these diseases, threatening to reverse progress made in public health interventions. Despite increasing efforts by African governments and international partners to bolster disaster risk management and build resilience, a significant gap remains in resources and effective, proactive strategies to mitigate these multifaceted threats².

Vector-borne diseases (VBDs) represent a significant public health burden in Africa, disproportionately affecting the continent's most vulnerable populations. While vector-borne diseases account for over 17% of all infectious diseases globally, causing more than 700,000 deaths annually, their impact is most profound in Africa³.

The African Region specifically bears a heavy load, with VBDs contributing to approximately 23% of the total burden of disease in the region. Malaria, the most lethal VBD, accounts for most of these cases and deaths, with an estimated 90% of global annual malaria deaths occurring in sub-Saharan Africa. Other prevalent VBDs, such as schistosomiasis, human African trypanosomiasis, dengue, and lymphatic filariasis, also contribute substantially to morbidity and mortality, severely limiting socioeconomic development in affected areas⁴.

The latest estimates by the World Health Organisation (WHO) show that in Africa, an estimated 233 million cases of malaria occur each year, resulting in approximately 1 million deaths. More than 90 per cent of these are in children under five. Official statistics show that currently, the African region bears the heaviest malaria burden, with 94 per cent

¹ African Risk Capacity (ARC) White Paper: "The State of Natural Disasters in Africa." (Published July 11, 2024)

² Down To Earth (DTE) Analysis based on EM-DAT data: "Africa's climate crisis: 2021-2025 marks the deadliest period in 15 years." (Published July 10, 2025).

³ World Health Organization (WHO). (n.d.). *Vector-borne diseases*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases>

⁴ WHO Regional Office for Africa. (2017). *Regional strategy for the management of environmental determinants of human health in the African Region 2017–2021*. AFR/RC67/6. Retrieved from

https://www.afro.who.int/sites/default/files/2017-07/AFR-RC67-6%20Regional%20strategy%20for%20environ%20health%20determ%20Human%20Health_1.pdf

of cases and 95 per cent of deaths globally, representing 233 million malaria cases and 580,000 deaths⁵.

Vector-borne disease outbreaks present a significant and persistent public health challenge in Africa, with a devastating impact on human lives. While a precise, single estimate for total deaths is difficult to obtain due to variations in surveillance and reporting, recent data from organizations like the World Health Organization (WHO) and Africa CDC paint a grim picture, with hundreds of thousands of fatalities annually. The most lethal of these diseases by a considerable margin is malaria, which accounted for approximately 95% of global malaria deaths in 2023, totaling an estimated 569,000 fatalities in the WHO African Region alone. This disproportionate burden is particularly severe for young children, who constitute a large majority of malaria deaths⁶.

Other vector-borne diseases, while less numerous in total deaths than malaria, also contribute significantly to the mortality rate. Yellow fever is estimated to cause between 29,000 and 60,000 deaths annually in Africa⁷. Lassa fever, though endemic in specific West African countries, is estimated to cause approximately 5,000 deaths per year, with a case-fatality rate that can be as high as 15% among hospitalized patients⁸. Dengue and Chikungunya are increasingly recognized as threats, with recent outbreaks resulting in hundreds of deaths across multiple countries. Leishmaniasis also contributes to the burden, with thousands of deaths reported annually in Eastern Africa. Finally, Rift Valley Fever, an outbreak-prone viral disease, can have a high case-fatality ratio in its severe hemorrhagic form, with several fatalities reported during recent outbreaks. The combined toll from these diseases underscores the urgent need for enhanced vector control, surveillance, and public health interventions to mitigate their devastating impact across the continent.

Vector-borne diseases in Africa are influenced significantly by climate change, leading to several emerging trends:

1. **Shift in Geographic Range:** Climate change alters temperature and precipitation patterns, influencing the habitats of disease-carrying vectors like mosquitoes. This has led to the expansion of these vectors into new areas, increasing the geographical spread of diseases such as malaria and dengue fever.
2. **Increased Incidence:** Warmer temperatures can shorten the incubation period for pathogens within vectors, accelerate their reproduction rates, and decrease the time between blood meals. These factors collectively contribute to increased transmission rates in many parts of Africa.
3. **Altered Disease Dynamics:** Climate changes can disrupt natural cycles of disease transmission. For instance, droughts followed by heavy rainfall can create ideal

⁵ World Health Organisation (WHO) Fact Sheet on Vector-borne diseases: "Vector-borne diseases." (Last updated September 26, 2024).

⁶ World Health Organisation. (2024). *Malaria Fact Sheet*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/malaria>

⁷ World Health Organisation. (2025). *Yellow Fever*. Retrieved from <https://www.afro.who.int/health-topics/yellow-fever>

⁸ Africa Centres for Disease Control and Prevention. (2020). *Lassa Fever*. Retrieved from <https://africacdc.org/disease/lassa-fever/>

breeding conditions for mosquitoes, leading to sudden outbreaks of diseases like malaria and dengue.

4. **Impact on Vulnerable Populations:** Climate change disproportionately affects vulnerable populations such as those living in poverty or lacking access to healthcare.
5. **Challenges for Control Programs:** Climate variability complicates the effectiveness of disease control programs. Traditional strategies for vector control, such as insecticide-treated nets and indoor residual spraying, may become less effective if the behaviour or distribution of vectors changes due to climate shifts.

To mitigate these impacts, there is a growing need for adaptive strategies that consider the effects of climate change. This includes community education on disease prevention, research, and rollout of new vector control approaches and tools.

The IFRC recognizes the need to enhance the capacities of African national societies in their emergency responses. National societies are often the first to respond to emergencies. Investing in National Societies is closely aligned with the localisation agenda, and in the long term, this will contribute to achieving universal health coverage.

Vector control has been identified as a knowledge gap amongst many first responders, including the Red Cross and Red Crescent Network in Africa⁹¹⁰, hence the need to build capacity to build our teams

The IFRC, Netherlands Red Cross, and UNICEF, with support from the Mentor Initiative and the Dutch Disaster Risk Reduction & Surge Support (DRRS) Programme, will host a Vector-Borne Diseases Training in Nairobi from September 1st to 5th, 2025.

Training content, training objective and approach

The training has the objective of introducing WASH and Health Staff of the Red Cross and the Eastern African WASH sector to key principles of vector control to enable them to design or implement the right steps to design a vector control program based on risk and health data.

This intensive course will train WASH and Health staff, as well as programme managers working in humanitarian contexts, on how to develop and implement vector-borne disease control programmes. It will provide participants with a comprehensive understanding of how vector-borne diseases can be controlled during humanitarian crises.

This training will cover the following subjects:

- Diseases covered will include Malaria (vivax and falciparum), Dengue, Chikungunya, Lymphatic Filariasis, Schistosomiasis, African Trypanosomiasis, Hemorrhagic Fevers (including Yellow Fever, Japanese Encephalitis, Hantavirus,

⁹ World Health Organisation. (2022). Global Technical Strategy for Malaria 2016–2030, Mid-term review: Progress and challenges. World Health Organisation.

¹⁰ Ssemanda, J. J., Opigo, J., Odongkara, B., Tumwebaze, P., Nankabirwa, V., Tukei, V. J., ... & Nanyonjo, M. (2023). Knowledge, Attitudes and Practices on Malaria Vector Control among Community Health Workers in Uganda: A Cross-Sectional Study. *Malaria Journal*, 22(1), 1-13.

and African hemorrhagic fever). The focus will be on the most common diseases, such as Dengue and Malaria.

- The four common Vector control strategies (including prevention strategies); biological, chemical, environmental, and mechanical and their applications in humanitarian/emergency and more developmental settings.
- Introduction to Insecticide resistance, World Health Organisation Pesticide Evaluation Scheme, WHOPES guidelines, and other important aspects of setting up a vector control program.
- Safety, safe handling, environmental risk and safe disposal of common materials and possible chemicals used in vector control

In addition, participants will be introduced to the most common and up-to-date vector control strategies.

The course will be delivered by a team of experienced specialists from the Mentor Initiative.

It is designed to be participatory, using a problem-based approach to teaching and learning. Throughout the workshop, participants will be encouraged to actively engage, share their experiences, and reflect on lessons learned. A variety of teaching methodologies will be employed, including lectures, problem-solving exercises, role plays, and practical demonstrations, such as Indoor Residual Spraying and larviciding.

This course will use a combination of plenary, participatory, teamwork, practical and Q&A sessions each day to systematically build an understanding of vector-borne diseases, their relevance, the peculiarities of their vectors, and how to control them, individually and in combination, in challenging settings. The course will draw from examples of effective Vector control approaches achieved in humanitarian crises and will also actively draw on participants' experience of different contexts.

Mentor Initiative has been contracted by the Netherlands RC based on a competitive bidding process as the training consultant. The consultant has been tasked to develop relevant training modules and related material and facilitate the training.

Expected Learning Outcomes

By the end of the course, participants will be able to:

1. Understand the principles of vector-borne disease control, including surveillance and monitoring, as well as effective personal and community protection strategies.
2. Prepare and plan effective priority interventions tailored to emergency contexts, adapting programme approaches as situations evolve from the post-emergency phase to reconstruction.
3. Determine the most effective combination of tools and coordinate efforts with national and international partners to address crises.
4. Monitor and evaluate the impact of vector control interventions.

5. Demonstrate a good understanding of available vector control tools, including when to use or avoid next-generation dual AI mosquito nets¹¹, spatial repellents, and World Health Organisation Pesticide Evaluation Scheme (WHOPES guidelines for insecticide selection, and safe use and disposal of chemicals used in vector control.

Follow-up plan after the training

1. The existing National Societies' capacity mapping databases/tools will be updated to capture the newly trained Health and WASH staff
2. Selected participants for this Regional Vector control training will be further built in capacity as trainers of trainers (TOT). To support cascading the knowledge and skills gained to the branch levels in their respective National Societies, focusing on branches serving communities prone to vector-borne diseases.
3. Establish a regional workforce /Technical working group focusing on Vector-borne diseases and Vector Control (constituted of African National Societies, IFRC, Partner National Societies, ICRC and Non-Red Cross organisations/agencies – WHO, IOM, MSF, UNHCR)
4. The trained capacities will be prioritised to be engaged in vector-borne related responses in their respective countries, and available to support cross-border deployments under the surge localisation roadmap
5. Explore innovative partnerships to collaborate and resource mobilise for a multi-partner Regional/multi-country proposal on the control of vector-borne diseases

This training is not an isolated effort; rather, it is a localised and practical implementation of continental and global strategies aimed at strengthening health systems and building community resilience against epidemics. Its importance is underscored by the lessons learned from previous and ongoing public health crises, particularly in the fight against malaria.

The International Federation of Red Cross and Red Crescent Societies (IFRC) places a high priority on epidemic and pandemic preparedness and control, with a strong focus on community-level action¹². The training directly supports the IFRC's "as local as possible" humanitarian response approach by empowering Red Cross and Red Crescent WASH and Health staff to design and implement effective, contextually appropriate vector-borne disease control programs. This emphasis on community-based surveillance, intervention planning, and coordination is central to the IFRC's strategy, which recognizes that epidemics start and end in communities. By training local staff, the program strengthens National Societies' operational readiness and leadership, enabling them to act as auxiliary partners to their governments and become the first line of defense against

¹¹ Next-generation, dual-AI (active ingredient) mosquito nets, like [PermaNet Dual](#) and [Interceptor® G2](#), are designed to combat insecticide resistance in mosquitoes, a major challenge for [malaria prevention](#). These nets incorporate two different insecticides, typically a pyrethroid and a non-pyrethroid, to overcome resistance mechanisms developed by mosquitoes. Studies have shown these nets to be highly effective in reducing malaria cases, even in areas with high resistance to traditional pyrethroid-only nets.

¹² International Federation of Red Cross and Red Crescent Societies (IFRC). (2025). *Epidemic and pandemic preparedness*. Retrieved from <https://www.ifrc.org/our-work/health-and-care/emergency-health/epidemic-and-pandemic-preparedness>

outbreaks. The training's content on personal and community protection strategies, as well as the use of effective tools, directly contributes to the IFRC's goal of empowering communities with the knowledge and skills needed to prevent, detect, and respond to health threats.

Similarly, the training is in lockstep with the priorities of WHO Africa, the Africa CDC, and the African Union. These organizations advocate for a shift from vertical, disease-specific control programs to an integrated, systems-based approach. The training curriculum, which covers a range of vector-borne diseases (including malaria, dengue, and chikungunya) and various control strategies (biological, chemical, environmental, and mechanical), reflect this integrated approach. The African Union's Roadmap to 2030 and beyond envisions controlling diseases like malaria and responding effectively to pandemics¹³. The Africa CDC's strategic framework emphasizes strengthening surveillance and disease intelligence, as well as building a robust public health workforce¹⁴. By teaching participants how to use risk and health data to design vector control programs, the training enhances their capacity for surveillance and evidence-based decision-making core tenet of the Africa CDC's work. The training's focus on coordination with national and international partners further reinforces the continental bodies' goal of promoting inter-country and regional collaboration on surveillance and shared data use.

The importance of this training is further illuminated by the lessons and achievements of the Alliance for Malaria Prevention (AMP), a partnership housed and chaired by the IFRC¹⁵. The AMP has been instrumental in the large-scale distribution of insecticide-treated nets (ITNs) across Africa, a cornerstone of malaria prevention. However, a key lesson learned from these efforts is the growing challenge of insecticide resistance. The training addresses this head-on by covering topics like insecticide resistance and the use of next-generation dual-AI mosquito nets. This demonstrates a crucial evolution in public health strategy, moving beyond traditional tools to embrace innovative solutions that are necessary to maintain the gains made against diseases like malaria. AMP's success in coordinating massive campaigns also highlights the need for effective logistics and supply chain management, which is a key component of the training's focus on program design and implementation. Furthermore, AMP's achievements in using data for decision-making and building local capacity are mirrored in the training's learning outcomes, which aim to equip participants with the skills to monitor, evaluate, and adapt interventions as situations evolve.

In essence, this Regional Vector Control training is vital because it translates high-level strategic priorities into actionable skills at the community level. It addresses the real-world challenges of vector-borne diseases in Africa by bridging the gap between policy and practice. By building a cohort of skilled Red Cross and Red Crescent staff and other partners, the training strengthens the continent's ability to prevent and respond to epidemics, ultimately contributing to a more resilient and healthier Africa.

¹³ African Union. (2025). *The AU Roadmap to 2030 & beyond envisions ending HIV as a public health threat and controlling TB, Malaria, NTDs and NCDs while responding effectively to pandemics*. Retrieved from <https://au.int/pt/node/44542>

¹⁴ Africa Centres for Disease Control and Prevention (Africa CDC). (2024). *Africa CDC Launches a Continental Blueprint to Combat Endemic and Neglected Tropical Diseases*. Retrieved from <https://africacdc.org/news-item/africa-cdc-launches-a-continental-blueprint-to-combat-endemic-and-neglected-tropical-diseases/>

¹⁵ The Alliance for Malaria Prevention (AMP). (2025). *The Alliance for Malaria Prevention*. Retrieved from <https://allianceformalariaprevention.com/>

Alignment with the Africa Regional Strategic Priorities

The training directly addresses several key strategic priorities within the IFRC, particularly in the Africa region:

Health and Care Framework 2030: The training's focus on disease prevention, health promotion, and health and WASH emergencies preparedness and response directly aligns with the "Areas of Focus" in the IFRC Health and Care Framework 2030. Specifically, it contributes to

Pillar 1: Global Health Security by enhancing epidemic and pandemic preparedness and readiness, strengthening the community health workforce, and improving surveillance. It also aligns with

Pillar 3: Global WASH Services, as vector control often integrates with WASH interventions. The framework explicitly mentions "efforts to better prepare for and respond to the next epidemic and pandemic", which the training directly supports by covering diseases like Malaria, Dengue, and Chikungunya.

Evolving Crisis and Disasters: The IFRC Secretariat Strategic Plan and the Health and Care Framework highlight the increasing complexity of disasters, including epidemics and climate-related events. The training's emphasis on vector control in humanitarian crises and its coverage of diseases exacerbated by climate change (e.g., Dengue) directly responds to this evolving crisis landscape. The WASH Surge Road Map for Africa also notes that "74 per cent of natural disasters between 2001 and 2018 were water-related, including droughts and floods", which often create conditions for increased vector-borne diseases. The training focuses on adapting to situations evolving from post-emergency to reconstruction phases, further reinforcing this alignment.

The "Red Ready in Africa" initiative emphasizes that Africa is significantly affected by numerous disasters, including those with health impacts. The training's regional focus ensures that the interventions are relevant to the specific challenges and disease burdens of the continent. The "WASH Surge Road Map - Africa Region" specifically mentions "In times of crisis, whether natural or conflict-induced, affected communities are more susceptible to illness and death from waterborne and Vector borne diseases, caused by the interruption of water, sanitation and hygiene services after a disaster strikes", reinforcing the critical need for health interventions like vector control in the region

Contribution to African National Societies' Development

The training is fundamentally designed to build the capacity of National Societies, which is a core objective across several IFRC strategies:

Enabler 1: Strengthening National Society Leadership on Health and WASH: The Health and Care Framework 2030 explicitly identifies "Strengthening National Society Leadership on Health and WASH" as a key enabler. By training WASH and Health staff on designing and implementing vector control programs, the course directly empowers NS personnel to take leadership roles in critical health interventions.

Building Competencies and Resources: The IFRC Surge Strategic Plan 2024-2028 states that the "engagement aims to enhance the operational readiness of NS by equipping them

with the necessary competencies and resources to respond effectively to a wide range of emergencies". The vector control training directly provides these necessary competencies, enabling NS to respond to vector-borne disease outbreaks.

Addressing Capacity Gaps: The "Rapid Response Localization of Surge Roadmap 2022-2025 Africa Region" highlights the need for "Surge capacity strengthening" and notes that NS in Africa have been strengthening local capacities at national, provincial, and branch levels. This training directly contributes to this by providing specialized knowledge and practical skills (e.g., Indoor Residual Spraying, larviciding) that can be applied at these local levels. The training objective to enable staff to "design or implement the right steps to design a vector control program" empowers NS with program management skills.

Community-Based Action: The Health and Care Framework 2030 emphasizes "community-based action". By training WASH and Health staff who work directly in communities, the vector control training facilitates the implementation of interventions at the grassroots level, thereby strengthening the NS presence and impact at the branch level.

Contribution to the Localization Agenda

The training significantly contributes to the localization agenda by empowering local actors and shifting responsibility and resources to the national and local levels:

Empowering Local Actors: The IFRC Secretariat Strategic Plan notes "a growing push for more responsibility and resources to be provided to local or national actors". The vector control training, by targeting Red Cross WASH and Health Staff in the WASH sector, directly invests in the capacities of these local and national actors to lead humanitarian responses.

Contextually Appropriate and Sustainable Interventions: The IFRC Surge Strategic Plan 2024-2028 states that "localization involves empowering local actors to take the lead in humanitarian response, ensuring that interventions are contextually appropriate and sustainable". By providing training that encourages participants to "actively engage, share their experiences, and reflect on lessons learned" and draw from "participants' experience of different contexts," the course fosters the development of context-specific vector control strategies.

Regional and Local Surge Capacity: The "Rapid Response Localization of Surge Roadmap 2022-2025 Africa Region" is explicitly designed to localize surge capacity. The training for regional WASH and health staff builds a pool of local experts who can be deployed rapidly within their regions, reducing reliance on international deployments and strengthening regional and local response mechanisms. The IFRC Surge Strategic Plan also emphasizes that "Regional assets will be composed of local efforts, leveraging the collective strengths and resources of NS within a given region to enhance coordination and response capacity".

"As Local As Possible, As Global As Necessary": The "Rapid Response Localization of Surge Roadmap 2022-2025 Africa Region" explicitly aligns with the Grand Bargain commitments, which advocate for "as local as possible, as global as necessary". By enhancing the capacity of National Societies in vector control, the training supports this principle, allowing local and regional teams to take the lead where possible, thereby making humanitarian response more efficient and sustainable.

Value for Money and Time Efficiency Analysis

Travel and Logistics: For regional in-person training, this will be significant. Costs include flights, accommodation, local transport, venue rental, catering, and materials. Given the target audience (WASH and Health Staff from multiple countries), these costs will be substantial.

Facilitation: The "Mentor Initiative" has been contracted as the training consultant. Their fees, including development of modules and facilitation, will be a major cost component.

Opportunity Costs (NS and IFRC): Participants' time away from their regular duties represents an opportunity cost. For NS, this could mean temporarily reduced capacity in ongoing programs or emergency responses. For IFRC, it's the resources dedicated to organising and overseeing the training.

Benefits:

Enhanced Capacity and Preparedness: The training's core benefit is building crucial skills in vector control, directly impacting the ability of NS to prevent and respond to outbreaks. This leads to reduced morbidity and mortality from vector-borne diseases.

Improved Program Design and Implementation: Participants will gain the knowledge to "design or implement the right steps to design a vector control program based on risk and health data," leading to more effective and targeted interventions.

Standardization and Best Practices: The training introduces participants to WHO WHOPES guidelines and up-to-date strategies, promoting adherence to international best practices.

Networking and Knowledge Sharing: An in-person regional training fosters peer-to-peer learning, networking, and the exchange of experiences among Red Cross and WASH sector staff from different countries. This informal learning can be invaluable.

Localisation of Expertise: Investing in local and regional staff reduces reliance on costly international deployments in the long run.

Long-term Health System Strengthening: By empowering NS staff, the training contributes to the sustainable strengthening of national health systems, particularly in the context of epidemic preparedness.

Cost-Benefit Conclusion: While the upfront costs (travel, logistics, facilitation) are high for an in-person regional training, the long-term benefits of enhanced capacity, improved health outcomes, and strengthened localized response capabilities likely outweigh these costs. The ability to design context-specific programs and coordinate with national and international partners (as per expected learning outcomes) offers significant returns. The reduction in future emergency response costs due to better preparedness is a substantial, albeit harder to quantify, benefit.

Assessment of Resource Use (IFRC and NS):

Good Use of Resources: Yes, this activity appears to represent a good use of IFRC and NS resources for the following reasons:

- Strategic Alignment: As analyzed previously, the training directly aligns with key IFRC and Regional strategic priorities, especially in health, WASH, and localization. Investing in core strategic areas is a prudent use of resources.
- Capacity Building: Investing in human capital through targeted training is a fundamental way to strengthen organizational effectiveness and sustainability.
- Proactive vs. Reactive: This training enables proactive preparedness, which is generally more cost-effective than reactive emergency responses to full-blown epidemics.
- Expert Delivery: Contracting "The Mentor Initiative" ensures high-quality content and delivery by experienced specialists, maximizing the impact of the training.

Timing and Disruption Assessment:

- Potential for Disruption: Any training that removes key staff from their duties carries a risk of disrupting critical operations. For NS, especially those in humanitarian contexts, staff availability can be highly constrained, particularly during ongoing crises or peak operational periods.
- Mitigation:
 - Advance Planning: Careful scheduling, well in advance, is crucial to allow NS to plan for staff absences and ensure adequate coverage.
 - Participant Selection: NS should strategically select participants whose temporary absence will have minimal impact or whose training will provide the greatest long-term benefit for their operations.
 - Duration and Intensity: The course is described as "intensive." While this maximizes learning in a shorter period, it also means a concentrated period of absence.

Evaluation of Lower-Cost Alternatives (Virtual, Field-Based):

- Virtual Training:
 - Pros: Significantly lower travel and logistics costs; potentially more flexible scheduling; allows more participants from different locations without physical travel.
 - Cons: Less effective for practical demonstrations (e.g., IRS, larviciding); reduced opportunity for hands-on problem-solving and role-playing; potential for connectivity issues in some regions; less direct peer-to-peer interaction and networking; difficulty in assessing practical skills. The participatory nature, problem-based approach, and emphasis on sharing experiences might be diluted in a purely virtual setting.
- Field-Based Training:
 - Pros: Highly practical, allowing real-world application and immediate contextualization; potentially lower travel costs if conducted at a central field hub or for participants from nearby areas; direct observation of challenges and solutions in a local context.
 - Cons: May be difficult to bring participants from multiple countries to a single field site; may disrupt ongoing field operations; might lack the

structured environment for theoretical components; specific field conditions may not be representative for all participants.

Conclusion on Alternatives:

- While virtual or field-based alternatives could offer lower costs, they are unlikely to deliver *the same outcomes* as comprehensive, in-person, regional training of this nature. The "practical demonstrations, such as Indoor Residual Spraying and larviciding," and the emphasis on "problem-solving exercises, role plays" are best achieved in a dedicated, in-person environment.
- The rich exchange of experiences and networking among participants from various Eastern African contexts is also a strong benefit of a regional in-person format that is harder to replicate virtually.
- Therefore, for training with such a strong practical and participatory component and aiming for comprehensive skill-building and regional networking, a purely lower-cost alternative might compromise the quality and completeness of the learning outcomes. A blended approach (e.g., some virtual pre-course work, followed by intensive in-person practicals) could be considered for future iterations to optimize costs.

In summary, despite the inherent costs of regional in-person training, the comprehensive nature, strategic alignment, and practical skill-building components of this Vector Control Training suggest a strong justification for its value for money, especially when considering the long-term benefits of enhanced preparedness and localized capacity in a critical health area. Careful planning is essential to mitigate potential disruptions to NS operations.

Participants

This first-of-its-kind training will be delivered in English, and hence the selection of Anglophone countries, which in the past 10 years have had cases of vector-borne related outbreaks. Discussions and separate arrangements will be explored for the Francophone Countries, which also require such training.

The training will target both WASH and Health staff in several National Societies

In addition to Red Cross and UNICEF staff, the organisers have reserved a limited number of places for WHO, UN, NGO staff, and consultants working in the humanitarian sector.

Workshop Funding:

Already, we have Euro 50,000 funded by the Netherlands Red Cross active pledge. Several Partner National Societies have expressed interest in supporting the workshop with additional funding/facilitation. ICRC has also expressed interest in facilitating National Societies' participants to attend the workshop.

Workshop Programme

Time	Monday – 1 st September 2025	
09:00	Welcome and Introductions	
09:30	Pretest	
09:50	Introduction to Mosquito borne diseases – geography and human vulnerability to disease in humanitarian crises	Mosquito born: Malaria, dengue, chikungunya, yellow fever, Zika, West Nile
10:40	Break	
11:00	Introduction to Fly-borne diseases – geography (biological and mechanical disease transmission) and human vulnerability to disease in humanitarian crises	Fly-borne - biological: leishmaniasis, onchocerciasis, sleeping sickness, Fly borne - mechanical: 26 pathogens (trachoma to cholera)
13:00	Lunch	
14:00	Introduction to rodents and other vector-borne diseases – geography, and disease transmission	Lassa, Marburg, Ebola, Schistosomiasis etc...
15:30	Tea break	
15:45	Mosquito Biology (where, how and when they breed, rest and feed) and where they can be killed or controlled	Anopheles spp. Aedes spp. Culex spp.
17:00	Q&A	
17:30	Close	

	Tuesday- 2 nd September 2025	
09:00	Recap on the previous day	
09:15	Fly Biology (where, how and when they breed, rest and feed) and where they can be killed or controlled	Sandflies, Tsetse flies, Blackflies, Filth flies
10:30	Break	
10:50	Non-Insect Vector Biology (where, how and when they breed, rest and feed) and where they can be killed or controlled	Rodents Bats Snails Ectoparasites
13:00	Lunch	
14:00	Core vector control tools – understanding their operational, contextual and biological limitations	LLINs – dual AI Demuria IRS – new AI Larvicides
15:30	Tea break	
15:50	Practical aspects of planning, procurement, and operational logistics for IRS and larvicides	Including practical equipment handling
17:00	Q&A	
17:30	Close	
	Wednesday – 3 rd September 2025	
09.00	Recap on previous day	
09:15	New vector control tools – understanding how they work, what do they achieve that older VC tools can't, and why?	Spatial Repellents ATSB Long lasting larvicides Treated materials (blankets, hammocks, curtains)
10:30	Break	
10:50	WASH VC – water management – how to combine manual management approaches, long-lasting larvicides and insecticide-based VC tools to control three major mosquito spp. In urban and camp settings, family shelters and hospitals, to reduce suffering and death from VBDs	Latest WHO/UNICEF technical guidance
13:00	Lunch	
14:00	WASH VC – waste and faeces management – how to combine manual management approaches, insect growth regulators, spatial repellents or IRS to control sandflies and filth flies to reduce suffering and death from VBDs	Latest WHO/UNICEF technical guidance
15:30	Tea Break	

15:50	WASH & Shelter VC –management – how to combine manual management approaches, and vector control tool to manage ectoparasites (with and without animal hosts (fleas, ticks, bedbugs, lice and others) and reduce suffering and death from VBDs	Scabies to Plague
17:00	Q&A	
17:30	Close	
	Thursday – 4 th September 2025	
09:00	Recap on previous day	
09:30	Exercise: how to choose which tools for what contexts and mixes of disease	
10:30	Break	
10:50	Exercise: how to choose which tools for what contexts and mixes of disease	
13:00	Lunch	
14:00	Operational considerations: How to ensure maximal VC tool residual effectiveness How to maximise user acceptance, correct usage and health impacts How to minimize environmental contamination risks Q&A	
15:30	Tea Break	
15:50	Insecticides and larvicides: The theory: Why insects eventually outsmart chemistry How to monitor effectiveness and resistance. How to slow/mitigate the development of resistance When and how to change Q&A	
17.00	Post Test and Wrap up	
17:30	Close	
	Friday – 5 th September 2025	
8:30	PGL session, PGL and WASH guidance	IFRC – Maureen
10:00	Break	
10:30	CEA approaches	IFRC – Cynthia
12:15	Action plan/Way forward - RCRC planning after the training Closing Remarks	IFRC – Peter
13:00	Lunch	

Annexes

Descriptive Analytics



Descriptive%20Analytics.docx

Guide - Water and sanitation interventions to prevent and control mosquito-borne diseases: focus on emergencies



Vector control -
Mosquito borne disease

Community-Based Vector Control Strategies: Global Trend, Local Response - Technical Working Paper



MENTOR IFRC VBD
IFRC final draft (2).pdf

All Emergencies data from the IFRC Go platform since January 2015 to date



All-emergencies%20-Africa%20-%20Since9

Existing WASH Capacity in the African National Societies



WASH Staff -
Validation- 17th July :

Self-assessment of WASH surge technical competencies was conducted in June 2025 during the call for applications for WASH surge Roles – Process ongoing



Self-Assessment_of_
Competencies_for_the

PGI and WASH guidance

CEA and WASH guidance

IFRC Secretariat Strategic Plan -An agenda for renewal

HCD Framework updated with Operational Redirection - version December 14th, 2023

IFRC Surge Strategic Plan 2024-2028

WASH Surge Roadmap for the Africa Region

Rapid Response Surge Localization Roadmap 2022-25