Welcome to the
NNN Conference
2020

Accelerating to 2030:
Building Resilient NTD
Programmes in a
Changing World

With thanks to our
sponsors
Welcome to the NNN Conference 2020

Accelerating to 2030: Building Resilient NTD Programmes in a Changing World

With thanks to our sponsors

ntd-ngonetwork.org

Virtual Event

8th – 10th September 2020

Billy Weeks (2016, Chikwawa, Malawi)
NTD supply chain: A call for integration

Countries assessment completed

Countries included under the Ascend programme

ntd-ngonetwork.org

Ascend
West and Central Africa
Getting from Port to Patient starting with PLANNING & FORECASTING

National census data + annual growth %
Getting from Port to Patient through
STOCK & DATA MANAGEMENT

“Integrated storage system, fragmented supply”
— Boakai Boley, National Drugs Service MD, Liberia
Getting from Port to Patient through LAST MILE DISTRIBUTION & REVERSE LOGISTICS

One of the most important components of a robust SCM is having an efficient and effective Reverse Logistics system. This ensures a drastic reduction in drug wastage and almost all drugs are accounted for.

-- Hadiza Iliasu
NTDs Northwest Zonal Officer, Nigeria
Getting from Port to Patient starting with
PLANNING & FORECASTING
The key point for the NTDs SCM is **integration** into the NHMIS, this will go a long way to curb some of the challenges such as accountability of medicines and help to measure performance.

Also, at the lower level, integrating with the logistics management coordination unit (LMCU) will help to coordinate the supply chain activities such as distribution and reverse logistics in the states down to the community level.

- Yvonne Musa Oshuwa
Pharmacist, Head SCM Unit NTDs, Nigeria
Welcome to the NNNN Conference 2020

Accelerating to 2030: Building Resilient NTD Programmes in a Changing World

With thanks to our sponsors

(ntd-ngonetwork.org)

Virtual Event

8th – 10th September 2020

Billy Weeks (2016, Chikwawa, Malawi)
Overview

Spatial intelligence; what it is and how it can be applied to solve challenges routinely experienced in NTD surveillance and intervention management.
Challenges

Field teams often operate blindly; without maps or data to plan and deploy operations.

• Where do people live?
• Did interventions reach them?
• Was true coverage achieved?
Spatial Intelligence

- Satellite imagery
- Remotely sensed data
- Spatial modelling, incl. artificial intelligence & machine learning
- Digital maps & mobile platforms
Impact

• Increased health campaign coverages by 20-30%.
• Reduction in malaria incidence by 15% (comparing IRS alone to IRS + Reveal).
• Reduced cost per malaria case averted by 63%.

Thank you

- www.revealprecision.com
- info@revealprecision.com

Anna Winters (Co-founder & CEO)
awinters@akros.com

Kyle Hutchinson (Reveal Coordinator)
kthuthinson@akros.com
Welcome to the NNN Conference 2020

Accelerating to 2030: Building Resilient NTD Programmes in a Changing World

With thanks to our sponsors

Virtual Event

8th – 10th September 2020

ntd-ngonetwork.org
Providing analytical tools to understand the impact of MDA delays due to COVID19-related and help plan resumption of NTD programs
Key Questions

• How long can NTD interventions be postponed before progress towards the 2030 goals is affected adversely?

• In which settings will delay-related impacts be greatest?

• What, if any, remedial strategies can be implemented once activities resume,
  – in order to regain ground lost due to COVID19-related programme interruptions
  – minimize the risks of recrudescence of infection and disease
  – and even accelerate progress towards the goal
Modelled scenarios

Standard rounds in 2019

Counterfactuals of
- no interruption
- no remedial strategies

• Assumptions made about coverage
• Some of these have not been tested in programmes
• The impact on progress in any given population may be lesser or greater than presented here
• Delays to MDA rounds will lead to a greater numbers of infections in the community
  – Prevalent infections untreated AND new cases.
• The longer the delay to the scheduled MDA = greater the resurgence in infection & more rounds of treatment to reach 2030 disease targets
• Potential remedial strategies include extra rounds of MDA and different coverage or treatment strategies
Delays to the 2030 goals

- The underlying dynamics of each infection, local transmission parameters, duration of delay, chance and implementation of remedial strategies will influence the ultimate impact.

- High transmission areas face the greatest risk as infection resurgence will be greatest in these populations.

- Once programmes are able to resume community-based interventions, proposed remedial strategies may help to get progress towards goals back on track; these will require empirical confirmation in population-based studies.
Analytical Tools

• Working with ESPEN to provide access to these analyses in a user friendly format - linking to ESPEN data

• User can adapt analyses to local knowledge (e.g. coverage)
  – Duration of disruption

NTD Prevalence Simulator

Select a country to simulate outcome scenarios
Select a country

Before you start

HOW IT WORKS
The projections on this website provide guidance on the impact of more frequent, longer or higher coverage treatment strategies on achieving elimination as a public health problem. Please note that the model has only been validated against a certain number of settings, details of which can be found in this paper. A full model description can be found in the About section.

MSGMEN
Many urgent policy issues concerning the control and elimination of neglected tropical diseases NTDs can be informed by high-quality quantitative modelling. However, a dearth of modelling in this area prevents donors and policymakers from accessing existing expertise. We hope that our NTD Simulator can help close this knowledge gap.

Prevalence Data (under surveillance)

ESSEN Intervention Data

Setup
We hold the following information for KOZA.

Cameroon
KOZA

Disruption
Are you interested in a specific disruption scenario?
You will be able to change this later.

4 MONTHS COVID DISRUPTION  1 YEAR COVID DISRUPTION  18 MONTHS COVID DISRUPTION  2 YEAR COVID DISRUPTION

PREDICTIONS
Analytical Tools

- Modelling analysis outputs
  - Impact of programmes disruptions

- Evaluate impact of remedial strategies
  - Assist interventions planning decisions once programmes resume
Welcome to the NNN Conference 2020

Accelerating to 2030: Building Resilient NTD Programmes in a Changing World

With thanks to our sponsors

Virtual Event

8th – 10th September 2020

ntd-ngonetwork.org
Background

- March 2019, communications task team of the Conflict and Humanitarian Emergencies (C&HE) Working Group developed a survey to help the group prioritise what new tools or resources would be most beneficial to support organisations working in or who would consider working in areas affected by conflict and/or humanitarian emergencies.

- The survey was distributed through:
  - NNN list-serv
  - Disease specific platforms
    - International Coalition for Trachoma Control
    - Global Schistosomiasis Alliance
    - Zero Leprosy
    - Global Alliance to Eliminate Lymphatic Filariasis
    - STH Coalition
    - Onchocerciasis Network

- 28 people completed the survey
Three Major Needs Identified

• Identifying where NTDs and C&HE overlap
• Advocacy to donors and potential partners
• Information sharing on a range of topics:
  • Coordination
  • Case Studies (what worked and what hasn’t)
  • Protocol Development
  • Partnerships
  • Safety

Today I am presenting on behalf of the C&HE Group about the development of a resource guide to address the request for more information
Conflict and Humanitarian Emergencies

This Cross-Cutting Group comprises of NNN members with an interest in learning and advocating on the challenges presented for NTD control and elimination activities presented by conflict and humanitarian emergency situations as a guide to fighting NTDs.
Five Thematic Groupings of Information

- Resource Guide for Conflict and Humanitarian Emergencies
  - Getting started
  - Understanding the context
  - Community engagement
  - Security and participant safety
  - Programme/research planning

ntd-ngonetwork.org
1. Getting started

Working in areas affected by conflict and humanitarian emergencies requires tailored and targeted approaches that are often considered to be a major hurdle for NGOs. Settings can vary significantly across refugee camps, internally displaced persons camps, protection of civilian camps, unofficial camps and other post conflict or emergency situations. When getting started, organisations should identify the setting and its physical and health system structures, conduct a situational analysis, contact key stakeholders, and identify what formal agreements are required to work in the targeted setting.

- Identify the setting you are considering working in
- Conduct a situational analysis
- Engage key stakeholders
- Identify formal agreements needed to work in each setting

+ Resources for getting started
Identify the setting you are considering working in

Conduct a situational analysis

Engage key stakeholders

- In many humanitarian emergencies, settings will be managed by a UN agency. Organisations should identify and contact the managing UN agency (UN cluster lead) in order to identify themselves and learn what permissions must be obtained and what processes must be followed in order to implement NTD activities. Organisations should not assume that all settings/camps will be managed the same way.
- Identify which government ministries are involved in conflict and humanitarian emergency settings as this is likely different from the NTD department working in typical village environments. The government may have specific rules governing the work done with displaced populations, especially in camp settings.
- In many settings, other programmes will already be operating. Organisations should identify and contact lead NGO organisations to share information, gain insights about working in these settings, ensure programmes do not undermine each other. Based on the information gathered, organisations should determine if a coordinated approach would be ideal.
- Identify and contact other non-governmental groups that work within these settings. Gaining their permission may be required before work can safely and effectively be conducted. This might include rebel groups, community groups, tribal councils, religious leaders, etc.

Identify formal agreements needed to work in each setting
<table>
<thead>
<tr>
<th>Resource</th>
<th>Author</th>
<th>Key sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNHCR emergency handbook: setting strategy</td>
<td>United Nations High Commissioner for Refugees (2015)</td>
<td>The setting strategy is a component of the UNHCR Emergency Handbook. It includes sections such as accountability to affected people, evaluations of emergency operations, and inter-agency refugee response plans.</td>
</tr>
<tr>
<td>Information management toolkit</td>
<td>United Nations High Commissioner for Refugees (2015)</td>
<td>The Information Management Toolkit provides information and data management advice and tools meant to inform a coordinated humanitarian response during the first two to four months of a refugee emergency. The guidance provided is relevant and useful in a broader range of operational settings.</td>
</tr>
<tr>
<td>Disaster summary sheet armed conflict</td>
<td>acaps (2012)</td>
<td>This disaster summary sheet (DSS) provides a general profile of the potential impact of an armed conflict on important development issues, including health and WASH. The DSS helps understand what the actual impact and priority needs during an armed crisis may be, based on experience and lessons learnt from previous crises.</td>
</tr>
<tr>
<td>Malaria control in humanitarian emergencies: an inter-agency field handbook</td>
<td>World Health Organization (2013)</td>
<td>This handbook includes best practices for malaria programmes in humanitarian emergencies. Components of the handbook include coordination, mechanisms, assessment and operational planning, surveillance, outbreaks, case management, prevention, community participation, operational research and associated routine monitoring.</td>
</tr>
<tr>
<td>UNHCR emergency handbook coordination and partnerships</td>
<td>United Nations High Commissioner for Refugees (2015)</td>
<td>Coordination and partnerships is a component of the UNHCR Emergency Handbook. It includes sections such as civil - military coordination, coordination skills, methods and good practices, international humanitarian and development coordination architecture and MoUs and LoUs with UN agencies and NGOs.</td>
</tr>
<tr>
<td>Lessons learnt from coordinating emergency health response during humanitarian crises: a case study of implementation of the health cluster in northern Uganda</td>
<td>Journal Article: Olu et al. 2015. Conflict and Health.</td>
<td>This journal article explores issues which are important for strengthening health coordination during humanitarian crises.</td>
</tr>
<tr>
<td>Humanitarian negotiations revealed: the MSF experience</td>
<td>Medecins Sans Frontieres (2012)</td>
<td>This article explores the negotiation process to operate health services during the Sri Lankan civil war.</td>
</tr>
<tr>
<td>Tuberculosis: care and control in refugee and displaced populations</td>
<td>World Health Organization/United Nations High Commissioner for Refugees (2007)</td>
<td>This manual provides guidance to humanitarian agencies on the implementation of effective TB programmes for refugee and displaced populations.</td>
</tr>
</tbody>
</table>
Next Steps

• Resources will be updated quarterly
• Each section will be expanded upon as we learn new information
• Collect case studies from NGOs implementing NTDs in areas affected by Conflict and Humanitarian Emergency
• We welcome feedback/input from NNN membership on both the website AND on resources that can be included
  – Angelia Sanders
    ▪ Angelia.sanders@cartercenter.org
  – Tim Jesudason
    ▪ ictccomms@gmail.com

• Special thank you to the C&HE Cross Cutting Group for their work on the resource guide and to The Carter Center for their financial support to this web-based platform
Welcome to the NNN Conference 2020

Accelerating to 2030: Building Resilient NTD Programmes in a Changing World

With thanks to our sponsors

Virtual Event

8th – 10th September 2020

ntd-ngonetwork.org
Moving towards integrated NTD approaches: opportunities and challenges

Diepreye Ayabina, Jaspreet Toor, T. Deirdre Hollingsworth
NTD Modelling Consortium
Integrated NTD control

• Programs that combine interventions for various NTDs to target multiple NTDs at once

• Programs that combine NTD interventions with other public health programs to achieve a common goal

• Programs that collaborate with other sectors to address risk factors

*WHO aims for 90% of endemic countries with NTDs integrated into national health plans by 2030*
Opportunities for integration

A common platform requires combining activities for NTDs with similar delivery strategies and interventions.

- Planning and programme managements

- Preventive chemotherapy: creation of PCT packages by combining MDA for more than one NTD.

- Health care worker training
Challenges

• Resentment among managers and staff that might emerge as programs are combined and roles and responsibilities are condensed.

• Program staff will need to receive training on new diseases and activities.

• Challenge of using a single criteria (i.e. the patient’s height) for determining the correct dosage of all drugs distributed together.

• Drug co-administration challenges, for example, ivermectin for onchocerciasis cannot be administered in Loa Loa endemic areas.
Conclusion

• A siloed focus on each disease independently to achieve the 2030 targets may not be cost-effective or sustainable.

• Integration of NTD control programmes should be led by countries with support from donors and partners.

• Maintaining the balance between disease specific and integrated approaches.
With thanks to our generous sponsors…

• BMGF

• NTD modelling consortium
Welcome to the NNN Conference 2020

Accelerating to 2030: Building Resilient NTD Programmes in a Changing World

With thanks to our sponsors

8th – 10th September 2020
MSF: The challenges of managing Innovative and Intensified Disease Management (IDM) NTD’s in the field

• **IDM: Buruli ulcer, Chagas disease, human African trypanosomiasis leishmaniasis and yaws**
  – difficult and costly to manage – diagnosis, treatment and follow up;
  – burden is poorly understood;
  – lack of appropriate control tools;
  – relatively lower investment in research and development;
  – people affected often live in remote rural areas with poor health systems and limited access to diagnosis and treatment.

• In Africa, MSF provides care for visceral leishmaniasis in projects in Sudan, South Sudan and Ethiopia, and for HAT in DRC and CAR.

• Both are fatal, parasitic diseases affecting the poorest of the poor
MSF and visceral leishmaniasis (VL) in Africa (1988-2019)

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>VL cases treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>1988 – 1989</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1996 – 2005</td>
<td>36,763</td>
</tr>
<tr>
<td></td>
<td>2010 – 2019</td>
<td></td>
</tr>
<tr>
<td>South Sudan</td>
<td>1989 – 2019</td>
<td>66,398</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1997 – 2019</td>
<td>17,626</td>
</tr>
<tr>
<td>Uganda</td>
<td>2000 – 2006</td>
<td>2,437</td>
</tr>
<tr>
<td>Somalia</td>
<td>2001 – 2009</td>
<td>3,791</td>
</tr>
<tr>
<td>Kenya</td>
<td>2007 - 2012</td>
<td>3,083</td>
</tr>
<tr>
<td>Total</td>
<td>1988 - 2019</td>
<td>130,098</td>
</tr>
</tbody>
</table>
MSF HAT interventions and mobile team approach

- Between 1986 and 2018 MSF screened almost 3.5 million people and treated over 50,000 cases of HAT in 7 countries.
- Between 2015 and 2019, mobile teams visited hundreds of villages in DRC and screened 99,626 people. 235 cases were identified and treated. The teams were also active in South Sudan and CAR.
- Cases remained consistently low after 2016, which led to the decision to disband the mobile team in 2019.
HAT and VL: diagnosis and treatment in field conditions
HAT and VL: highly complex diagnostic algorithms; imperfect tools

African VL:

- **rK39 antigen-based rapid test** for clinically suspect patients: *suitable for field conditions, highly specific but sensitivity 80 - 90%*
- Rapid test negative and suspect: **laboratory** (serological Direct Agglutination Test (DAT) and parasitological confirmation in tissue aspirates via microscopy)
- Relapsed and non-responding patients: **laboratory** (parasitological confirmation in tissue aspirates via microscopy)

HAT:

- **Newly developed rapid tests** for clinically suspect patients - *suitable for screening only, quality control and supply issues*
- Confirmation of disease: **laboratory** (parasitological confirmation in tissue aspirates and/or CSF via microscopy, or/and collect blood on filter paper to be sent to Belgium (trypanalysis test))
African VL: complex hospital-based treatment

- **First line: SSG + paromomycin injections:** 17 days, 2 dd
  - Effective but painful and significant toxicity
  - High cost of long hospitalisation

- **Second line: long-course AmBisome** for vulnerable groups not tolerating SSG
HAT: significant advances in treatment through DNDi

- From nifurtimox-eflornithine combination therapy
  - 7 days of IV infusion, twice daily and 10 days of oral treatment
  - Complex logistics
  - Hospital-based
  - Only for non-neurological stage

- To oral fexinidazole
  - 10 days of oral treatment, one dose daily

- To acoziborole, a single dose oral treatment (in development)
WHO’s 2030 NTD roadmaps goals

**HAT:** Interruption of transmission (elimination) in 15 countries (62%)

**VL:** Elimination as a public health problem (defined as <1% case fatality rate due to primary visceral leishmaniasis) in 64 countries (85%)

- The most remote and neglected populations may remain neglected
- Case fatality rate is an indicator of quality care and early diagnosis and treatment, but not a measure of the true VL mortality in communities.

→ Critical for success is early detection and treatment at community level in all endemic areas, including remote and isolated areas’.
**Conclusion**

- HAT is now a low prevalence disease occurring in often extremely remote area’s (< 1000 cases in 2019)
  - MSF has shown that active case finding is no longer cost-effective
  - Integrated diagnosis and treatment with simplified diagnostic and treatment tools at community level may soon be possible

- African VL is still endemic in many areas, with regular epidemics occurring
  - MSF has shown that active case finding is not cost-effective, except in certain outbreak scenario’s
  - Better tools for decentralizing diagnosis and treatment are needed
  - Access to treatment is poor, with many cases remaining unnoticed
  - True mortality remains unknown

**We need to maintain the ‘momentum’** between partners during and after the COVID crisis, to avoid a re-emergence of VL & HAT (access, supply, MD training, com’ty-awareness) and an inability to detect it (epi, surveillance)
Welcome to the NNN Conference 2020

Accelerating to 2030: Building Resilient NTD Programmes in a Changing World

With thanks to our sponsors

Virtual Event
8th – 10th September 2020

ntd-ngonetwork.org
Understanding, applying and evaluating One Health to achieve the goals of WHO’s NTD Roadmap for 2030

• One Health - collaborative, multisectoral, and transdisciplinary approach – working at local, regional, national and global levels – to achieve optimal health and well-being outcomes recognizing the interconnections between people, animal, plants and their shared environment.

• One Health is still sparsely implemented in the field and has a special and high needs in development and humanitarian contexts in the Global South.
Understanding, applying and evaluating One Health to achieve the goals of WHO’s NTD Roadmap for 2030

- Around 50% of NTDs have animals as vector or / and an animal reservoir

- Lack of coordination between veterinary public health and public health sector, this is addressed in the WHO’s NTD Roadmap for 2030

- We as NNN have to acknowledge, recognize and promote the interconnections between diseases and people, animals, plants, water and their shared environment.
Understanding, applying and evaluating One Health to achieve the goals of WHO’s NTD Roadmap for 2030

• How can the One Health approach significantly increase the impact in the fight against NTD?
• Where are the chances?
• I would like to make two recommendations:
Opportunities for increasing impact

• Donors as key stakeholders in order to fund and realize One Health in consortia projects, increase the impact by “pooling and sharing” the different disciplines

• Convincing political actors and donors to following the One Health Approach by fighting communicable diseases, in particular zoonoses. Such as ministries, UN or European bodies, …
How NNN can support

• One Health offers opportunities to address the complex challenges found at the interfaces between humans, animals and the environment – especially among livestock-dependent communities – and therefore the NNN has to bundle more resources to assure One Health implementation.

• Developing a Global One Health Strategy for fighting NTDs

• Develop plans for coordinated Disease Control
With thanks to our generous sponsors...

American Leprosy Missions
Bill & Melinda Gates Foundation
SCI Foundation
NLR
CBM
Carter Center
MITOSATH
Sightsavers
WaterAid
Footwork
Uniting to Combat Neglected Tropical Diseases
FHI 360
International Foundation for Dermatology
ntd-ngonetwork.org