NTD update

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2030 NTD Roadmap
Sustain the gains, accelerate progress in NTDs: 2030 Roadmap

Neglected Tropical Diseases affect the world’s poorest communities

**NTDs are 20alled**

**Diseases caused by:**
- Parasites
- Bacteria
- Viruses
- Fungi
- and a range of transmission pathways
- All NTDs have devastating health and economic impacts on the most impoverished communities.

**NTDs covered by 2030 roadmap**
- Filariasis
- Chagas disease
- HIV and Chagas disease
- Onchocerciasis (blackfly
- Disease)
- Lymphatic filariasis
- Leprosy
- Nodular disease
- Schistosomiasis
- Lymphatic filariasis
- Onchocerciasis
- HIV
- Leprosy
- Nodular disease
- Schistosomiasis
- Lymphatic filariasis

**NTDs burden per million inhabitants, DAC/Y, 2014**

- 0.1
- 0.1-1.0
- 1.0-1.49
- 1.5-2.9
- 3.0-4.9
- 5.0-6.9
- 7.0-8.9
- 9.0

**The roadmap sets ambitious but realistic global targets for 2030**

**Arms of NTDs**

- 100
- Countries aiming to reach at least 1 NTD target by 2030
- and for specific diseases, of which:
  - 2:
    - Targeted for eradication
  - 3:
    - Targeted for elimination or control
  - 7:
    - Targeted for interruption of transmission
  - 8:
    - Targeted for control

**Cross-cutting approaches**

- Strengthening disease delivery platforms
- Improving the quality of NTD management
- Improving capacity to deliver interventions
- Enhancing oversight of NTD programmes
- Supporting research and development

**Actions in three areas are needed to implement the strategy and reach the targets**

- Programmatic progress
  - Ramp up the effort against the individual NTDs in technical progress, strategy, and service delivery

- Cross-cutting approaches
  - Increase integration among NTDs, mainstreaming into national health systems, coordination with other sectors and strengthening of country capacity and global support

- Operating model and culture
  - Increase country ownership at national and subnational levels, clarify stakeholders roles and align organizational cultures

All stakeholders have a role in achieving the targets: for example:

- Countries have strong NTD programme ownership, provide domestic finance and full adoption of cross-cutting approaches
- Funders and pharmaceutical companies support countries, help to fill the gaps
- Expertise and research and development community advances technical progress
The roadmap is...

- a high-level strategy that will set overall direction for fight against NTDs
- An aid to policy & advocacy efforts that will draw attention to key challenges across the 20 diseases
- A tool that will align efforts across stakeholder groups over the next decade
- a consultative approach that incorporates feedback from various stakeholder groups, including countries, donors, partners, and experts
- specific and measurable targets, overarching, cross-cutting, and disease specific which will contribute towards reaching the SDG 3
- a focus on cross-cutting approaches across NTDs, adjacent sectors, and health systems to reduce costs and increase impact within the context of UHC

The roadmap is distinguished by...
WHO General Programme of Work expires; related indicators are evaluated

Mid-review of performance against targets. Potential readjustment of strategies and targets based on progress thus far

NTD 2030 roadmap and Sustainable Development Goals expire

STAG requested targets and milestones beyond 2020

Collection of inputs on proposed targets through 1st round of online consultation

Collection of inputs on refined targets and disease assessments through 2nd round of online consultation

Roadmap to be presented for endorsement by the WHA

Peer review of the roadmap by key partners

Consultations with disease experts and stakeholders

STAG endorsed the roadmap

Roadmap to be presented for endorsement by the WHA
Different forms of coordination

Ministry of Health

- Ophthalmic health
- Mental health
- Disability & inclusion
- Woman and child health

Global vector control response

Other disease programmes
- Immunisation programmes
- Malaria
- TB
- HIV/AIDS
- Other communicable diseases

Other ministries or authorities
- Coordination with the Ministry of Finance, the Ministry of Interior / local governments, and the Ministry of Communications and Information is critical across all diseases.
- Coordination with migration and refugee authorities is required for NTDs that are endemic in settlements for refugees / internally displaced persons.

REFERRAL MANAGEMENT
Development of a referral system to refer NTD patients to the services of these sectors whilst increasing their capacity to deal with NTDs

STRATEGIC INPUT
NTDs provide strategic input into the existing programming of these sectors to direct their activities in ways that benefit NTDs

OPERATIONAL COLLABORATION
NTDs work with these sectors to operationally deliver interventions e.g. school-based deworming or distribution of nutritional supplements

- Infrastructure / built environment
- Justice / social welfare (human rights)
- Food safety
- Agriculture and Livestock (One Health)
- Water and sanitation (WASH)

- Nutrition
- Education

World Health Organization
## Ministry of Health

### Activities conducted by other ministry of health departments that are relevant for NTDs

<table>
<thead>
<tr>
<th>Global vector control response</th>
<th>Use of repellents and traps e.g. insecticide-treated bed nets/ screening; insecticides/molluscicides/fogging</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Environmental management to minimise available mosquito habitats, including</td>
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<td>- Housing improvements (in collaboration with ministries of infrastructure) e.g. plans to build vector-free housing including safe storage of water, sanitation, window screening and ensuring air flow to prevent vector entry and help keep houses cool</td>
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<td></td>
<td>- Container management e.g. covering, emptying, cleaning and disposing of containers (e.g. old tires)</td>
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<td>- Draining or treating stagnant water (in collaboration with ministry of water/WASH)</td>
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<td>Behaviour change e.g. wearing long clothing</td>
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<td>Use of other innovative approaches e.g. release of modified, transgenic or sterile vectors, spatial repellents to stop vector entry into households</td>
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<td>Mental health</td>
<td>Psychological support and counseling services for NTD patients</td>
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<td></td>
<td>Routine assessment on mental health for patients of specific NTDs, particularly those with a chronic condition</td>
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<td>Disability &amp; inclusion</td>
<td>Treatment of disability and morbidity management e.g. physical therapy</td>
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<td></td>
<td>Provision of support services and devices e.g. walking devices, prosthetics</td>
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<td>Training for self-management of disability and self-care techniques</td>
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<td>Woman &amp; child health</td>
<td>Awareness-building on diseases for which women and children are disproportionately at risk or for which there are particular manifestations in women (e.g. female genital schistosomiasis)</td>
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<td>Use of pre- and post-natal touchpoints e.g. in maternal health clinics to deliver interventions e.g. deworming tablets, supplements (e.g. iron) for pregnant women and children to prevent anaemia</td>
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<tr>
<td>Ophthalmic health</td>
<td>Promotion of eye care e.g. face washing, protecting eyes, eye examinations</td>
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<td></td>
<td>Provision of treatment for eye conditions related to NTDs including surgery where required</td>
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<td>Nutrition</td>
<td>Access to improved sources of nutrition to enable the development of strong immune systems and reduce susceptibility to infection e.g. for VL where malnutrition is a risk factor</td>
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<tr>
<td></td>
<td>Provision of food and supplements (e.g. iron, vitamin A) to combat common side effects of NTDs e.g. anaemia and nutritional impairment</td>
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<tr>
<td>Other disease programmes</td>
<td>Immunisation programmes: joint delivery of preventive chemotherapy to pre- school-age children through immunization programmes</td>
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<td></td>
<td>Tuberculosis: joint case detection for paragonimiasis (FBT), leprosy and other mycobacteria e.g. yaws, Buruli ulcer</td>
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<td></td>
<td>Malaria: synergise diagnostic efforts with HAT, vector control efforts against Anopheles mosquitoes</td>
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<td></td>
<td>HIV/AIDS: education on risks e.g. of coinfection with certain NTDs</td>
</tr>
</tbody>
</table>

1 Vector control may be managed under the Ministry of Environment in some countries
### Other Ministries or authorities

#### Activities conducted by other ministries or authorities that are relevant for NTDs

<table>
<thead>
<tr>
<th>Category</th>
<th>Activities</th>
</tr>
</thead>
</table>
| **Water and sanitation (WASH)** | - Providing access to improved water sources (that are protected from outside contamination)  
- Hygienic conditions for case management e.g. wound washing (rabies), self-care practices and morbidity management (e.g. personal hygiene and wound care for LF, leprosy, yaws), surgical procedures e.g. hydrocele and trichiasis surgeries  
- Sanitation – access to facilities and safe management of fecal waste to prevent transmission e.g. of STH, Taeniasis, FBTs  
- Promoting hygiene practices e.g. hand- and face-washing, prevention of open defecation, food hygiene, filtering water from open water bodies before drinking  
- Proper storage and disposal/drainage of water to reduce vector habitats |
| **Agriculture, environment, livestock, wildlife (One Health)** | - Understanding animal reservoirs and zoonotic transmission  
- Treating animals to prevent transmission  
  - Vaccinations e.g. mass dog vaccinations (rabies), pig and sheep vaccinations (taeniasis, cystic echinococcosis)  
  - Medical treatments e.g. deworming for pigs (Taeniasis), dogs (cystic echinococcosis), foxes (alveolar echinococcosis)  
- Animal husbandry and management e.g. dog tethering (dracunculiasis), keeping domestic animals and livestock away from human dwellings (mycetoma), preventing pig contact with human faeces (Taeniasis) |
| **Education** | - School-based mass drug administration against childhood diseases like STH, schistosomiasis, yaws  
- Awareness on practices to prevent NTDs embedded in national curricula e.g. hygiene practices and preventing mosquito breeding sites |
| **Justice / social welfare (human rights)** | - Preventing structural discrimination surrounding NTDs associated with high levels of stigma (HAT, leprosy, CL, LF, neurocysticercosis) e.g. abolishing discriminatory laws  
- Promoting inclusive access to resources and facilities, health and social services, education and employment opportunities  
- Conducting anti-stigma interventions e.g. community dialogues, engaging local leaders to share anti-stigma messages |
| **Infrastructure and the built environment** | - Housing improvements to minimise available mosquito habitats, including safe storage of water, sanitation, window screening, constructing drains that do not provide breeding sites for mosquitoes, and ensuring air flow to prevent vector entry and help keep houses cool |
| **Food safety** | - Food safety practices and regulations, including:  
  - For households and food handlers e.g. properly washing and cooking food before consumption, ensuring food quality  
  - For farmers and livestock keepers e.g. safe disposal of offal during slaughtering (echinococcoses) |

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1 School is one avenue for delivering MDA for school-aged children, however efforts should be made to ensure school-aged children not in school also receive MDA.

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World Health Organization
Interaction between NTDs and SDGs

Progress on other SDGs can facilitate achievement of the NTD goal

Successful interventions against NTDs can contribute to various other SDGs

SDGs require strong global partnerships
Global Strategy for Dengue Prevention and Control 2021-2030
2021-2030 goals

REDUCE THE GLOBAL BURDEN OF DENGUE

Draft objectives

1. To build capacity in countries to detect, prevent and respond dengue outbreaks
2. To reduce preventable dengue deaths to zero
3. To reduce the burden of disease in countries and reduce incidence by 25 %*

*2010-2020 levels as base line
Technical Elements

1. Diagnosis and case management
2. Integrated surveillance and intervention preparedness
3. Sustainable locally adapted vector control
4. Effective and affordable vaccine
5. Engage and mobilize communities
Foundation

1. Capacity building and program management

2. Advocacy among all stakeholders and strong political commitment including legislative support

3. Basic and applied research,
NEW ENABLING FACTORS

A. Partnership and resource mobilization
B. Inter and Intra-sectoral coordination and collaboration from local to national levels
C. Regional networking and cross border collaboration
D. Effective communication including risk communication
E. Monitoring, evaluation, and corrective action
F. Translational research into policy and operation and regulatory support
## DENGUE GUIDELINES

<table>
<thead>
<tr>
<th>INTERVENTION</th>
<th>LEVEL OF EVIDENCE</th>
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<tbody>
<tr>
<td>All interventions have a good evidence of entomological impact</td>
<td><em>Strong recommendation, low to moderate evidence.</em></td>
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<tr>
<td>All life stages of the mosquitos will be targeted (IVM)</td>
<td><em>Strong recommendation, low to moderate evidence.</em></td>
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<tr>
<td>Source reduction with active community support</td>
<td><em>Conditional recommendation (strong to moderate)</em></td>
</tr>
<tr>
<td>Chemical and biological larvicides to water storage containers</td>
<td><em>Strong recommendation (moderate)</em></td>
</tr>
<tr>
<td>Reaplication with environmental management</td>
<td><em>Strong recommendation (moderate)</em></td>
</tr>
<tr>
<td>INTERVENTION</td>
<td>LEVEL OF EVIDENCE</td>
</tr>
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<td>-----------------------------</td>
<td>---------------------------------------------------------------------</td>
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<tr>
<td>Targeted IRS</td>
<td>Strong recommendation, moderate evidence</td>
</tr>
<tr>
<td>Insecticide treated material</td>
<td>Conditional recommendation, low and moderate evidence.</td>
</tr>
<tr>
<td>Space Spraying</td>
<td>Conditional recommendation, low and moderate evidence.</td>
</tr>
<tr>
<td>Personal protection</td>
<td>Good practice statement</td>
</tr>
<tr>
<td>Improvement in housing</td>
<td>Good practice statement</td>
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</table>