How to keep HAT below elimination threshold 2020: A situational overview
Since the beginning of the 20th century, sleeping sickness has killed millions of people.
Objectives

● Current goal:

"To eliminate HAT as a public health problem by 2020".

● Further goal:

"To interrupt transmission of gambiense HAT (sustainable elimination) by 2030".
Cases HAT, 1940-2017
Active screening and cases reported

![Graph showing the decline in cases reported and expected from 2000 to 2020. The data indicates a significant reduction in cases, with a residual rate of 2% and a 98% reduction as of 2020.](image)
Distribution of cases, by village

The distribution of human African trypanosomiasis (2012-2016)

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.
Area at risk reporting ≥1 case / 10,000 people / year)
Gambiense HAT elimination: Area at Risk

The risk of Human African trypanosomiasis (2012-2016)

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So …

1. Real decreasing number of cases reaching milestones defined
2. Shrinking of the area affected

Is it real?

What is the coverage of the population at risk?
Coverage of population at risk: Active screening

The diagram shows the coverage of active screening over the years from 2000 to 2017. The x-axis represents the years, while the y-axis represents the number of cases. The graph includes bars for people actively screened, cases reported, and cases expected.

The map on the right indicates the coverage of active screening in various countries, with different colors representing different percentages of coverage.
Passive screening: Health facilities providing HAT diagnosis and treatment

2013

732 fixed health facilities provide any diagnosis of HAT.
530 fixed health facilities provide any treatment of HAT. (180 NECT)

2015

993 fixed health facilities provide any diagnosis of HAT.
548 fixed health facilities provide any treatment of HAT. (224 NECT)

2017

1 370 fixed health facilities provide any diagnosis of HAT.
686 fixed health facilities provide any treatment of HAT. (252 NECT)
But there is a certain underdiagnosis …

1. Areas with epidemiological situation not well known: Accessibility problem
   a) Geographical
   b) Security

2. Areas not well covered by activities
   a) Lack of resources
   b) Inadequate organization and management (community, SSNCP, others)
The risk of human African trypanosomiasis in the Democratic Republic of the Congo (2010 - 2014)
In 2016-2017, 17 endemic countries reported cases:
Angola, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Guinea, Malawi, Nigeria, South Sudan, Uganda, United Republic of Tanzania, Zambia, Zimbabwe
My country has eliminated HAT as a public health problem

Validation Dossier

- Information and requirements necessary to give proof of the absence of (or low) transmission

- The key elements assuring the presence of a functional surveillance system able to detect possible cases
A country could be considered as having eliminated HAT as PHP when dedicated medical activities have shown that there are <1 case / 10,000 people, in all the health districts of the country over the previous 5 years.

It is a reversible status.
### Criteria for requesting WHO validation of the elimination of gambiense HAT as a public health problem

<table>
<thead>
<tr>
<th>Activities of control and surveillance</th>
<th>True in all districts</th>
<th>Not true in one or more districts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>adequate</strong></td>
<td>Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Ghana, Togo, Uganda</td>
<td>Angola, Chad, Congo, Equatorial Guinea, Guinea</td>
</tr>
<tr>
<td><strong>insufficient</strong></td>
<td>Mali, Nigeria</td>
<td>CAR, DRC, Gabon, South Sudan</td>
</tr>
<tr>
<td><strong>absent</strong></td>
<td>Gambia, Guinea Bissau, Liberia, Niger, Senegal, Sierra Leona</td>
<td></td>
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</tbody>
</table>

- **Epidemiological situation (National Indicator for Elimination)**: <1 case / 10,000 persons / year, per health district, averaged over the previous 5-year period

- **Eligible for claiming the validation**: 
  - Green

- **Need to reinforce the surveillance before claiming the validation**: 
  - Orange

- **Non eligible for claiming the validation**: 
  - Red
Progression number of cases of HAT: perspectives

Elimination as public health problem

Elimination of transmission
Strategy of HAT elimination

- **Passive Surveillance**
- **Active Case Detection**
- **Vector Control**
- **Case Management**

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World Health Organization

5th Joint HAT platform – EANETT Scientific meeting
Kampala, 3-4 October 2018
Challenges for the elimination of HAT
Challenges and obstacles for elimination (1)

- Sociopolitical instability and insecurity context in certain areas hampering control and surveillance activities (e.g. South Sudan, CAR, Kasai in DRC)

How to run and maintain control and surveillance activities in insecure areas?
Challenges and obstacles for elimination (2)

- HAT control and surveillance activities should be sustainably integrated in the weak general health services with unskilled staff, lack of resource and low attendance rates.

- Progressive loss of expertise in NSSCPs, with lack of replacement. Simpler screening, diagnostic and treatment tools are needed.

The reinforcement of health services is a task going beyond HAT control programs.
Challenges and obstacles for elimination (3)

- Access to treatment is guaranteed, but it is needed to ensure the sustainable access to screening and diagnostic tools for the population at risk. There is a worrisome lack of funding mechanisms to support availability of diagnostic tools.

- The funding available to implement HAT elimination activities is far from being sufficient and sustainability of this support needs to be ensured.

- Are the funds available invested in the best way?

How to ensure access to diagnostics tools?

How to ensure the needed funding to move towards the elimination of HAT transmission in 2030?
Challenges and obstacles for elimination (4)

- **Ownership and commitment of national authorities** from endemic countries of the elimination drive.
- When HAT is not any more a health problem, it is difficult to keep the sensitization in the communities.
- Coordination between stakeholders with different agendas, in order to avoid overlapping and disruption in the way to sustainable elimination.

How to maintain the commitment of national authorities and stakeholders beyond 2020?
Technical questions pending for elimination

- To improve diagnostic tools
  - To get **better and simpler confirmatory** tests and more performant screening tools.
  - To develop **tools for surveillance** of elimination of HAT, able to detect a disease reemergence/reintroduction (sustainability) and to monitor the elimination of HAT transmission.

- To develop methods able to estimate the proportion and location of **undetected cases**

- To clarify the epidemiological role played by **human carriers and animal reservoirs** in maintaining transmission and re-emergence of gambiense HAT

- To improve the treatment tools to facilitate the management of patients
Conclusions

- Important progress has been done in the HAT control and today we are closer than ever to reach the elimination of this disease.

- But we need to avoid triumphalism and keep a long term view. Challenges are many and not negligible.

- To reach the elimination, it would be needed **SECURITY**.
Conclusions

- Important progress has been done in the HAT control and today we are closer than ever to reach the elimination of this disease.

- But we need to avoid triumphalism and keep a long term view. Challenges are many and not negligible.

- To reach the elimination, it would be needed:
  - To integrate HAT control in the existing health system reinforcing the integrated and reactive surveillance system.
  - To reinforce leadership and ownership of SSNCP and health authorities in the process of HAT elimination.
  - To maintain a coordination with the different partners.
  - To ensure availability of diagnostic and therapeutic tools.
  - To ensure a sustainable financial support.

- To be open to adapt to the changes in the epidemiological situation and to the progress in the development of new tools.
Thanks for your attention