

32nd ISCTRC Conference

Khartoum, 8th – 12th September 2013
The Atlas of HAT

Initiative launched by WHO, jointly implemented with FAO in the framework of the Programme Against African Trypanosomiasis (PAAT).

Dynamic tool based on Geographic Information Systems (GIS):

Methodology

- To map all HAT cases reported since 2000 at the village level through a Geographical Information System (GIS).
- To include data of active screening activities (even if no cases were detected)
- To update yearly the data
- To build the capacity at country level for optimal utilization of this tool and for its future regular update and use
1) **Epidemiological data**
   
   New HAT cases reported  
   Active screening activities

2) **Geographical data**
   
   Related to the locations of epidemiological interest.
   
   - GPS coordinates:
   - Data from Gazetteers and geographical databases
   - Sketchy maps
   - Descriptive information provided by NSSCP field staff,

3) **Data source**
   
   - Information on the sources used
Data processing completed for 25 countries reporting on HAT in the period 2000-2009.

<table>
<thead>
<tr>
<th>Cases Reported:</th>
<th>166,778</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola (21,997 cases) and DRC (102,205 cases) already included</td>
<td></td>
</tr>
<tr>
<td>Cases mapped:</td>
<td>152,268 (91%)</td>
</tr>
</tbody>
</table>
Completion of the Atlas of HAT 2000-2009

The Atlas of human African trypanosomiasis
The Atlas of human African trypanosomiasis


Countries

- Zimbabwe
- Zambia
- Tanzania
- Uganda
- Mozambique
- Malawi
- Kenya
- Uganda
- South Sudan
- Nigeria
- Guinea
- Ghana
- Gabon
- Eq. Guinea
- DRC
- Côte d'Ivoire
- Congo
- Chad
- CAR
- Cameroon
- Angola

% of mapped cases

0 10 20 30 40 50 60 70 80 90 100

T.b.g.

T.b.g.
Data processing completed for 22 countries reporting on HAT in the period 2000-2012.

<table>
<thead>
<tr>
<th>Cases Reported:</th>
<th>169,903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola, DRC and Uganda in process</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cases mapped:</th>
<th>155,461 (91.5%)</th>
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</thead>
</table>

| Geographical locations included: | 26,169             |
Future process of update

Ministries of Health in HAT-endemic countries
National sleeping sickness control programmes (NSSCPs)

National Repositories

National Databases

GIS
Maps
Charts
Tables

Planning
Monitoring
Evaluation

Traditional reporting
Backup-backstop
Standardized reporting
Quality assurance

World Health Organization (WHO)
Food and Agriculture Organization of the United Nations (FAO)
Programme against African Trypanosomiasis (PAAT)

Central Repository

Verification

Central Database

GIS
Maps
Charts
Tables

Planning
Monitoring
Evaluation
Data access

- Data are available in WHO and FAO/PAAT web page
  - http://www.who.int/trypanosomiasis_african/country/foci_AFRO/en/

- Data can be requested to WHO. The requests are considered by an exit committee
Publications

- **Estimating and mapping the risk of sleeping sickness** *PLoS Neg Trop Dis*, 2012, 6(10), e1859


- **Mapping sleeping sickness in Western Africa in a context of demographic transition and climate change.** *Parasite* 2009, 16(2): 99-106.


- **Diversity of human African trypanosomiasis epidemiological settings requires fine-tuning control strategies to facilitate disease elimination.** *Res Rep Trop Med* 2013:4 1–6
Atlas and HAT elimination

• Planning interventions
  – At focus level defining to transmission intensity
  – At village level according to the presence of cases

• Monitoring and evaluation of elimination progress
  – Measuring main indicators
    • Number and distribution of cases reported
    • Number of foci declared as eliminated
  – Assessing the quality and extent of the elimination activities
    • Rate of population at risk covered by control and surveillance activities
    • Progress of population at different levels of risk
Prospects

• Continuous update of the Atlas must be ensured

• Transfer technology to NSSCPs, providing training and equipment (hardware and software), for an optimal utilization of the tool, and update of the Atlas.
Acknowledgements

• SSNCP and national health authorities of Angola, Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Gabon, Ghana, Guinea, Kenya, Malawi, Mali, Mozambique, Nigeria, Rwanda, Sierra Leone, Sudan, Togo, Uganda, United Republic of Tanzania, Zambia and Zimbabwe;

• the NGOs: MSF, Epicentre, IMC, Malteser International and Merlin;

• the Research Institutions “Institut de Recherche pour le Développement”, “Institut Pierre Richet” (Côte d'Ivoire), “Projets de Recherches Cliniques contre la Trypanosomiase” (Côte d'Ivoire), “Centre International de Recherche-Développement sur l’Élevage en zone Sub-humide” (Burkina Faso), The Centre for Infectious Disease, College of Medicine and Veterinary Medicine, The University of Edinburgh.