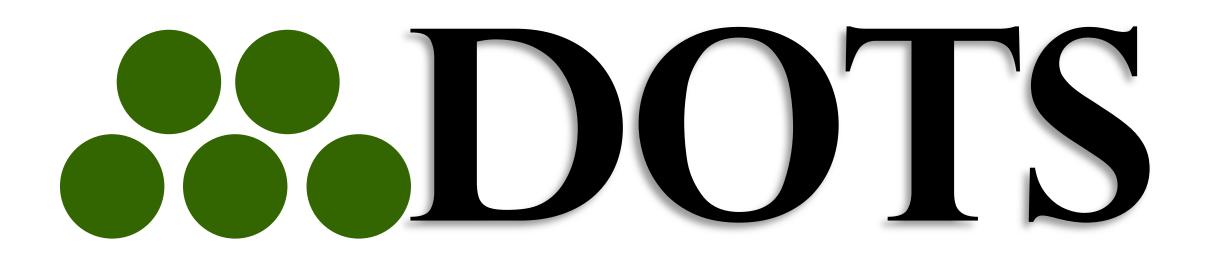


# DOTS: For More Than Just TB

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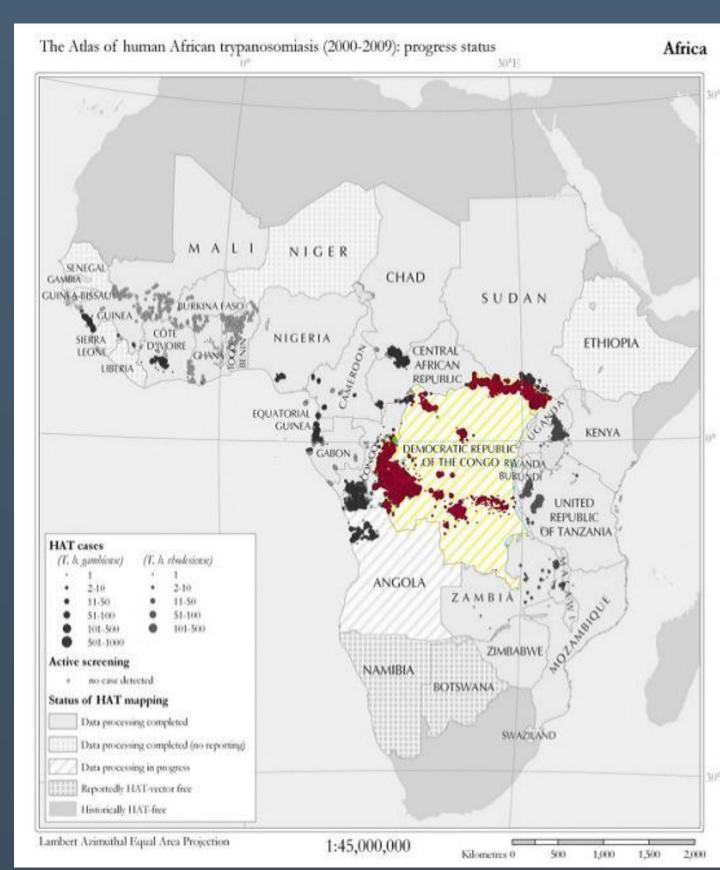
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#### Need:

Effective and uninterrupted treatment of Visceral Leishmaniasis in Brazil and African Trypanosomiasis in the Democratic Republic of the Congo (DRC)





V. Leishmaniasis in Latin America

A. Trypanosomiasis in Africa

V. Leishmaniasis	
What is it?	Disease caused by parasite carried by sand flies
Incidence	200 million people at risk, 500 000 cases/year
Location	Brazil is one of the 7 countries that account for >90% of global cases.

#### A. Trypanosomiasis

Disease caused by parasite carried by tsetse flies 60 million people at risk, ~60 000 cases/year

DRC had over 70% of all global cases (past 10 years)

### V. Leishmaniasis **Treatment:**

### Oral Miltefosine

- 100mg/day, 4 weeks, for
- adults; 2.5mg/kg a day, 4 weeks, for children
- Cure rate almost 95%
- US\$125-US\$200 per treatment completion

## A. Trypanosomiasis:

#### 1<sup>st</sup> line:

- IV or IM pentamide 4mg/kg per day for 10 days
- >90% cure rate; cost is more than US\$100 per treatment completion

#### 2<sup>nd</sup> line:

- IV melarsopropol 2.3mg/kg daily for 10 consecutive days
- 90%-95% cure rate; more than US\$155 per patient

### Approach:

Implementing a modified DOTS protocol that pertains to Visceral Leishmaniasis and African Trypanosomiasis

#### What is DOTS?

#### Directly Observed Treatment Short course

- WHO recommended program to cure tuberculosis (TB)
- Focuses on patients adhering to treatment
- Minimizes drug resistance
- Huge investment in national healthcare
- Highly efficient and cost-effective
  - Cure rates of more than 85%

### **DOTS PROCEDURE**

SUSTAINED COMMITMENT

• Political & financial commitment

#### **EVALUATION & IMPACT MEASUREMENT**

- Recording and reporting system
- System sustainability

#### **DRUG SUPPLY & MANAGEMENT**

- Uninterrupted, sustained, and quality assured drug supply
- Drug distribution system
- Drug cost minimization Drug use regulation

#### **DIAGNOSIS**

- Case detection
- Blood test for AT & VL
- Skin test for VL
- Strengthen laboratory network
- Drug susceptibility tests

#### STANDARDIZED TREATMENTS

- Treatment services
- Supervision & patient support
- Improve access to treatment

#### DOTS

Strengthens healthcare system Linked with WHO's 1<sup>st</sup> Millennium Development Goal (eradicate extreme hunger and poverty) Stimulates economy Reduces development

of drug resistance

Reduces rate of transmission

and occurrence

Pros

Requires significant

### Cons

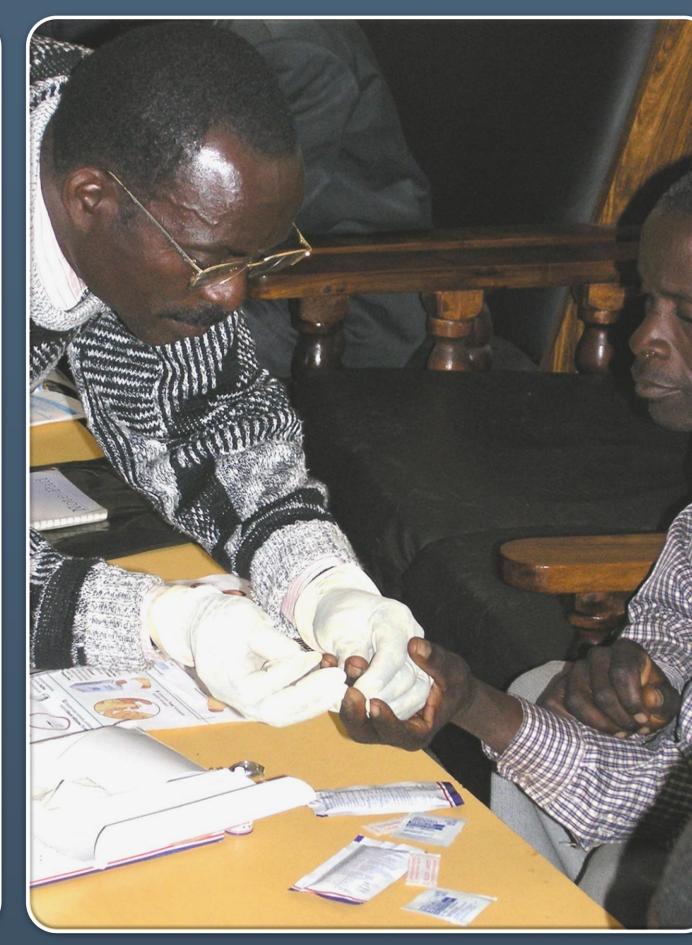
Potentially very expensive

(Solution: join forces with other stakeholders)

government commitment

(Solution: work on public-private mix of healthcare providers)





A boy with *V. Leishmaniasis* 

Diagnosing A. Trypanosomiasis

### **Existent DOTS Initiatives**

#### Brazil

- USAID & PAHO/Brazil (Pan American Health Organization)
  - Nurse Supervisor Training Project: it ensures effective timely monitoring, evaluation and implementation of the disease
- Drugs for Neglected Diseases Initiative (DNDi) partnered with the Brazilian Ministry of Health
  - Combination therapy to reduce resistance

### **Democratic Republic of Congo**

- USAID: In 2008, funds totaled almost \$4.3 million in DRC
  - Improving drug distributions
  - Training health workers
  - Strengthening lab network and capacity

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