

# World Health Assembly Resolution 54.19 and the Role of PAHO/WHO

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[www.unicef.org/eapro/de-wormfamily.jpg](http://www.unicef.org/eapro/de-wormfamily.jpg)



PAHO/WHO Preparatory Meeting on  
Epidemiological Data Needed to Plan  
Elimination of Schistosomiasis in the Caribbean  
(Grenada, December 2007)

# World Health Assembly

## Resolution 54.19

- **Approved in 2001, by consensus of WHO member states**
- **Targets school-age children (SAC)(6-15 yrs)**
  - SAC “at risk of morbidity”
  - Does not exclude other at-risk groups needing treatment
- **Objective to be reached by 2010**
  - Coverage of at least 75% to 100% of SAC “at risk of morbidity” with regular antihelminthic chemotherapy
    - i.e., living in areas where STH have public health consequences
  - Complemented by other preventive measures

# Endorses Regular Treatment of High-risk Groups

- “School-age children in particular”
- [Others may include:]
  - Women of child-bearing age and adolescent girls in poor communities
  - Indigenous populations, ethnic minorities
  - Shanty-town, slum and *favela* dwellers
  - Certain occupational groups: irrigation workers, migrant agricultural laborers, fishers, refuse workers and rubbish-pickers
  - Institutionalized populations: prisoners
  - AIDS patients
  - Orphans and the elderly

# Further Endorsements

- **Ensure access to single-dose drugs in Primary Health Care services**
- **Ensure access to essential drugs in all health services in endemic areas for treatment of**
  - **Clinical cases**
  - **Groups at high risk of morbidity (e.g., women and children)**
  - **Obtain a minimum target of regular administration of chemotherapy to  $\geq 75\%$  to 100% of SAC at risk of morbidity by 2010**

# Further Endorsements

- Implement plans for basic sanitation and adequate safe water supply
- Promote access to safe water, sanitation and health education through intersectoral cooperation
- Ensure that any development activity likely to favour the emergence or spread of parasitic diseases is accompanied by preventive measures [mitigation, HIA health impact assessment]
- Mobilize resources to sustain control

# What Constitutes Morbidity?

- Clinical consequences of infections with S/STH
  - Blood loss --> Iron-deficiency Anemia (hookworm, Trichuris, schistosomiasis)
  - Intestinal obstruction (Ascaris)
  - Dysentery syndrome, chronic dysentery, rectal prolapse (Trichuris)
- Signs:
  - Ascaris leaving orifices of the body (nose, mouth, rectum)
  - Blood in stool (not specific)
  - Diarrhea, malaise, weakness, abdominal pain, fever, wheezing, bronchitis? – all non-specific.

# What Constitutes Morbidity?

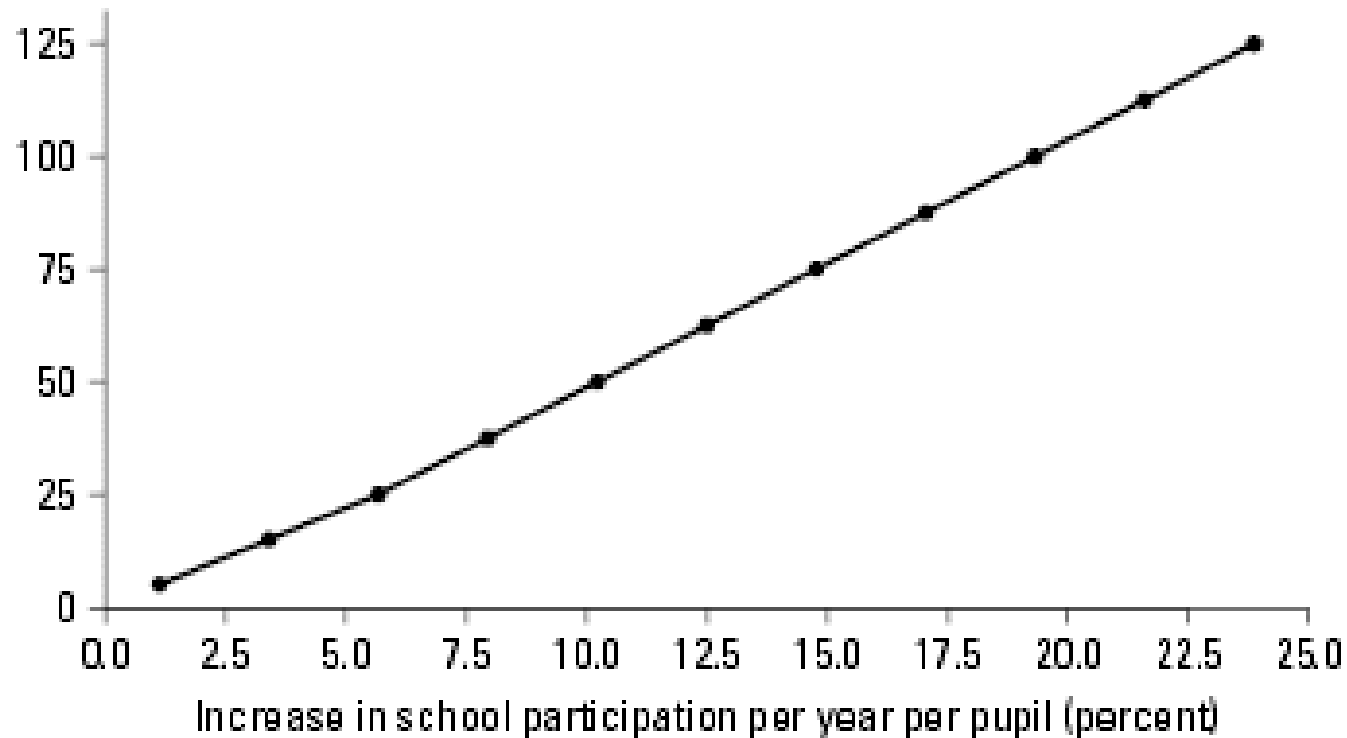
- Growth retardation
  - pre-school, <3 years of age
  - Stunting, wasting
- Child development
  - Reduced cognitive function (tests)
  - Poor school performance (reading, vocabulary)
  - Poor school attendance

# Impact of Deworming on School Attendance in Kenya

- The study by [Miguel and Kremer \(2003\)](#) in Kenya ... In addition to providing health gains, deworming reduced total primary school absenteeism by at least one-quarter in the first two years of the project. The gains were largest for the youngest children, who suffered from more intense worm infections. Externalities would cause a substantial underestimation of this effect. In terms of cost-effectiveness as an *educational* intervention, deworming proved to be far more effective at improving school attendance than other educational interventions implemented in a study in Kenya. Deworming offers a high rate of return, increasing the net present value of discounted wages by more than US\$30 per treated child compared with per treatment costs of under US\$1. For realistic estimates of returns to schooling, these results show in general that the net present discounted value of lifetime earnings is high compared with the costs of treatment even for small gains in school participation ([figure 24.3](#)). *Disease Control Priorities in Developing Countries. 24. Helminth Infections: Soil-transmitted Helminth Infections and Schistosomiasis.*

E. A. Miguel and M. Kremer. 2003. Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities *Econometrica* 72: 1 159-217.

*Net present value of discounted wages (US\$)*



**Source:** [please provide source info.]

**Note:** Assumptions are as follows: a 7 percent return to an additional year of school; wage gains earned over 40 years in the workforce, discounted at 5 percent per year with no wage growth; and annual wage earnings of US\$400 per year, which is below the estimated agricultural and nonagricultural annual wages for low-income countries in the World Bank (2003).

# Role of PAHO/WHO supporting WHA54.19

- Advocacy in public fora
- Facilitate development of partnerships
- Technical cooperation to MOH and other implementing partners: surveys, resistance monitoring, drug donations and procurements, training, resource mobilization
- Collection of SAC coverage data at least annually, reported to WHO-Geneva
- Promotion of operational research
- Promotion of sustainability
- Monitoring and evaluation