

Task force on target setting and reporting
Bratislava, Slovakia 10-11 may 2012

**Elimination of morbidity
due to
intestinal worms (STH) in EURO**



Intestinal worms (Soil Transmitted Helminth – STH)

The main Intestinal worms (Soil Transmitted Helminths) are:

Ascaris lumbricoides (roundworms)

Trichuris trichiura (whipworms)

Ancylostoma duodenale and

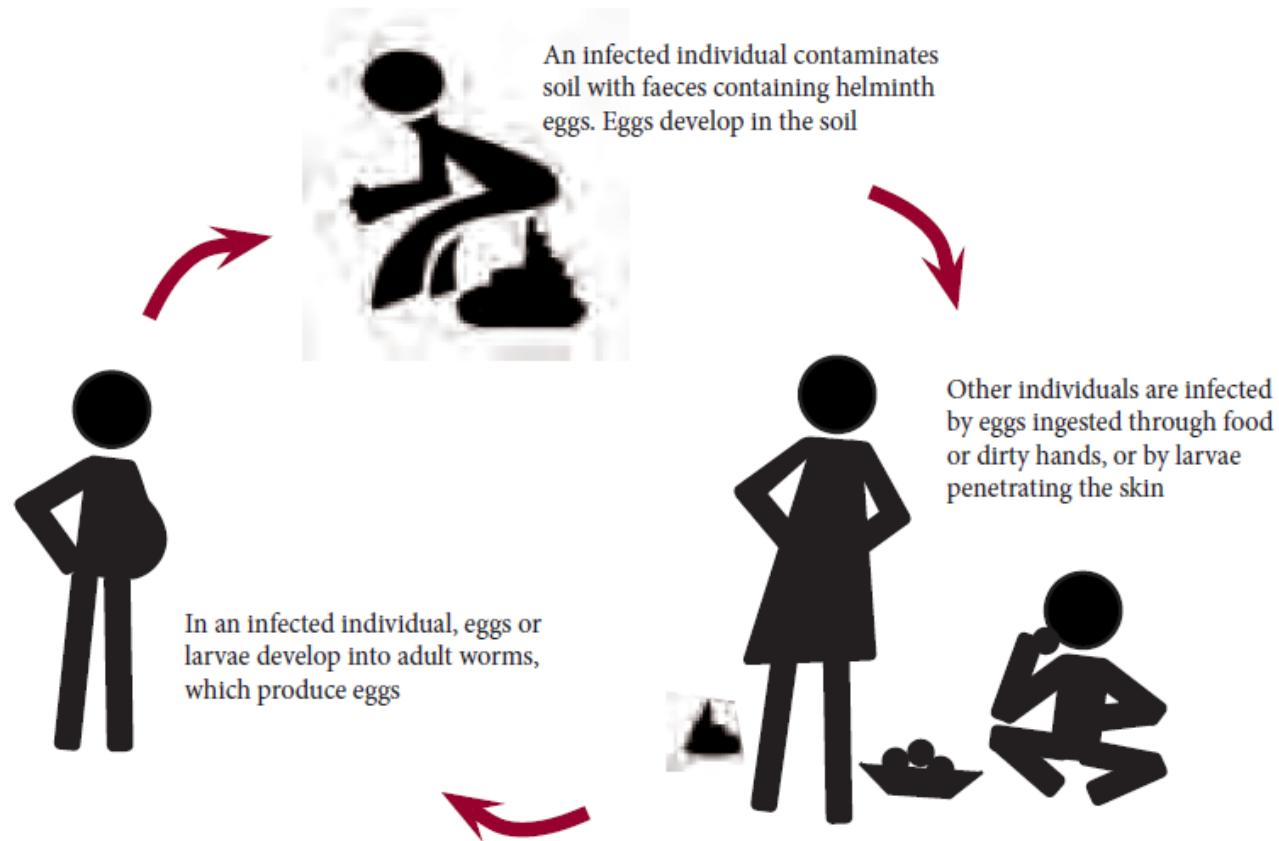
Necator americanus (hookworms)



The parasites cause blood loss and compete with the host for micronutrients, this results in malnutrition, growth retardation and poor school performances.

Intestinal worms

Schematic life-cycle of soil-transmitted helminths



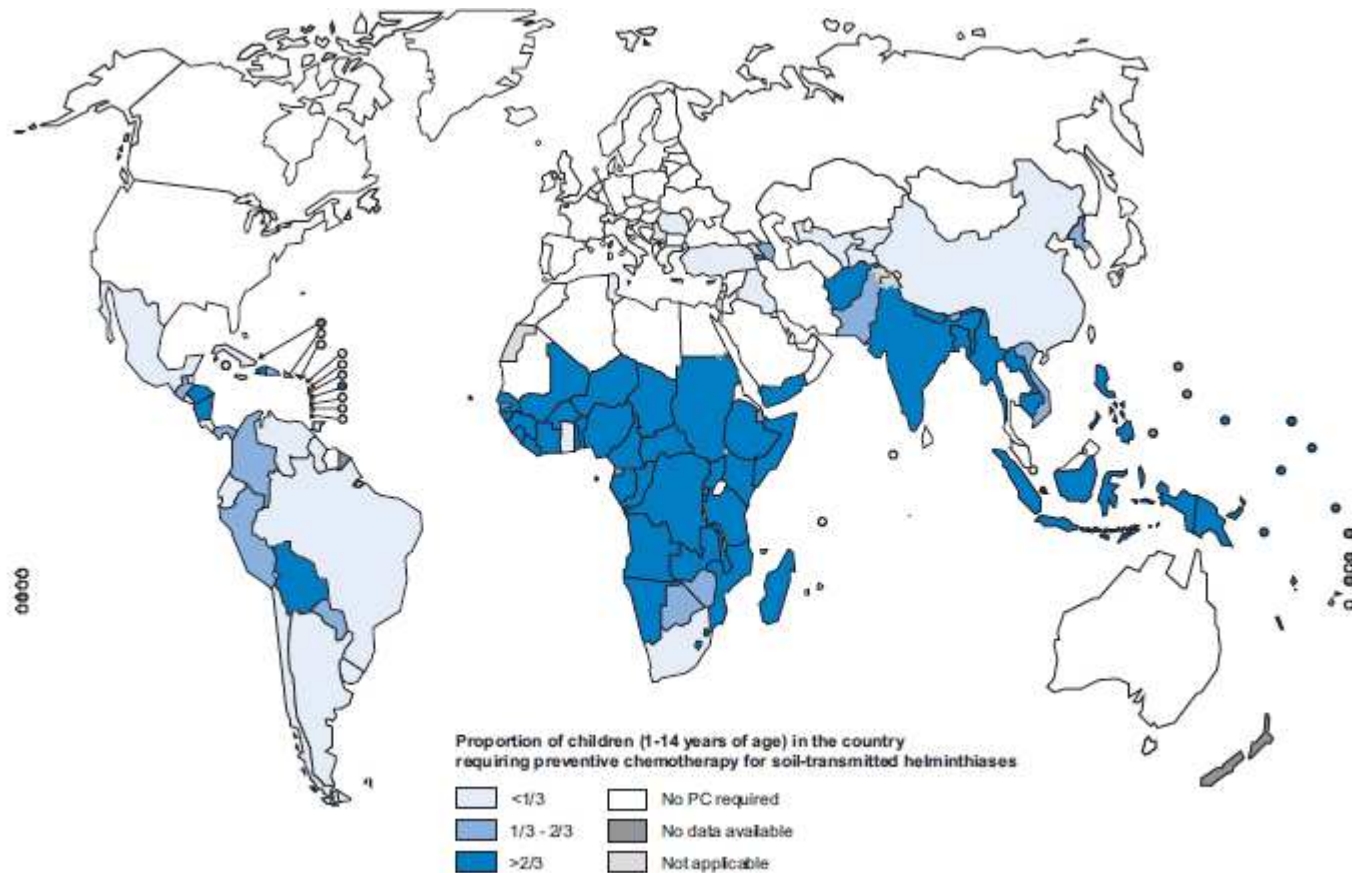
Target

Pre-school and school age children are the target of the control activities because:

- Are more vulnerable to infection and morbidity
- Are the main responsible for environmental contamination



STH world wide



STH in EURO



Estimated number of people requiring PC		
pre-SAC	SAC	Total
1 223 098	3 054 623	4 277 721

Estimated number of children in need of intervention in EURO (2010)

Country	Pre SAC	Coverage	SAC	Coverage
Armenia	13,180		28,806	
Azerbaijan	337,055		743,315	43%
Kyrgyzstan	31,230		72,563	
Montenegro	1,676		4,633	
Republic of Moldova	34,606		79,985	
Romania	234,750		608,404	
Serbia	26,489		67,397	
Tajikistan	31,000	100%	74,378	
The former Yugoslav Republic of Macedonia	5,217		14,928	
Turkey	407,270		1,049,531	
Uzbekistan	111,869		282,338	

WHO recommendations

WHO recommends STH control by periodical distribution of anthelmintics because:

- Individuals do not recognize to be infected and therefore only a minority actively ask for treatment
- Drugs are effective, safe and donated and therefore an efficient control programme can be implemented with minimal costs



Realistic targets for EURO countries

STH infections have been eliminated in several European countries

Periodical deworming is simple and low cost (less than 2 cents/child) and will eliminate the health damages produced by worms.

The first step could be the **mapping** of the areas in need of intervention in each country

The intervention can be then conducted simultaneously in each area in need.

If many children are in need of deworming, a pilot phase can be conducted

Improvement of the sanitation standard should accompany the deworming activities to make the benefits permanent

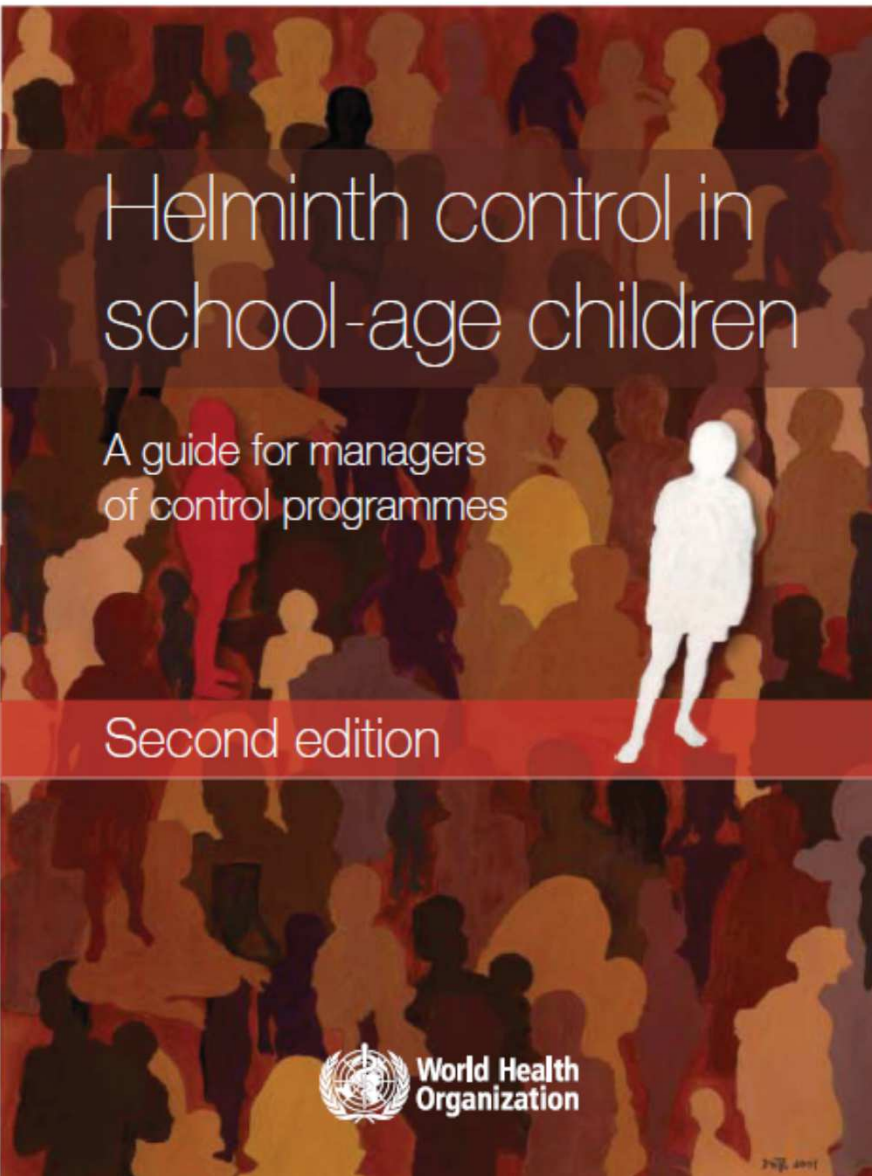
Identification of areas in need of intervention

Areas in need of treatment with anthelmintic can be identified by analyzing health units reports: if STH is frequently reported this is an indication of high transmission.

Transmission is frequently occurring in remote and poor areas with poor sanitation.

The first step for the establishment of a control programme is to map the areas suspected for STH transmission and then conduct a small survey to evaluate the prevalence.





A manual recently published by WHO provides guidance on the organization of surveys for STH including:

- Sample size
- Laboratory method to be used
- Forms
- Monitoring and Evaluation activities

WHO recommend, as **minimal** intervention, treatment of the entire child population when the STH prevalence is over 20%.

In EURO countries, drug distribution campaigns are organized when the prevalence is over 10%

http://www.who.int/intestinal_worms/en/index.html

Monitoring activities

Indicator category	Use	Frequency of collection
Process	Determine whether organizational elements of the control programme are in place and are functioning properly	At every drug administration round
Performance	Assess whether coverage of the control programme has reached its objective	At every drug administration round
Impact	Assess whether the health impact of the programme has been achieved	At baseline and every 2–3 years thereafter



Drug procurement and deworming

WHO provide free medicines (albendazole 400 mg or mebendazole 500 mg) to MoH in countries willing to establish a control programme.

The administration of the drug (1 tablet/child) can also be conducted by non-medical personnel.

Deworming programme should be organized with a strict collaboration among MoH, MoE and W&S services.

Every year 200 million children are treated world wide with no major problems

Health education should accompany drug distribution



STH prevalence provide indication for the lack of sanitation

- Transmission of STH is a clear indication of poor sanitation standard and can be use to prioritize W&S interventions
- When sanitation improvements accompany the periodical deworming the health benefits are increased and prolonged

Thank you



Deworming in Tajikistan 16-27 April 2012

