

**Consultation on Yaws elimination
5–7 March 2012, WHO Headquarters, Geneva
Room M505**

Background

In spite of the successful campaigns led by WHO and UNICEF in the past to control yaws, the goal of elimination/eradication was not reached in some countries. Rather, the considerable reduction in the number of cases by the year 1970 led to the gradual dismantling of the vertical programmes and premature integration of yaws control activities into the primary health care system. The resources and commitment for yaws activities also disappeared. By the late 1970's, the disease had begun to resurge resulting in the World Health Assembly Resolution 31.58 in 1978. Renewed control efforts particularly in West Africa in the 1980s failed after a few years because of lack of political will and resources.

Yaws has been forgotten, though its devastating consequences still affect some marginalized populations, especially children. The last estimate by WHO¹ in 1995 yielded a global prevalence of 2.5 million cases of endemic treponematoses (mostly yaws), including 460,000 infectious cases (Annex 1). The situation today remains unknown globally but there is increasing evidence that the number of cases in some countries are increasing in previously endemic foci. However, it is possible that yaws has been eliminated from many of the 46 countries that were endemic in at the time of the 1950's campaigns. In 2006, India declared the elimination of yaws (interruption of transmission). In 2007, yaws was included in the list of diseases covered by the WHO Department for the Control of Neglected Tropical Diseases.

Since 2010, the endemic countries in the South-East and Western Pacific regions are Indonesia, Timor-Leste, Papua New Guinea, Solomon Islands and Vanuatu. In Africa the disease is present in Benin, Cameroon, Central Africa Republic, Congo, Cote d'Ivoire, Democratic Republic of the Congo, Ghana, Sierra Leone, Togo. In most of these countries under-reporting of cases may be considerable. There is no recent information on yaws in the Americas except for a paper published 2003 declaring the elimination of yaws in Ecuador².

Benzathine pencillin has been the “magic bullet” for yaws treatment and control. It is still very effective and inexpensive. However, its administration in mass treatment campaigns is operationally and logistically difficult. The recent publication in the *Lancet*³ on the use of a single-dose azithromycin in the treatment of yaws is a major advance in the history of the disease and could potentially facilitate the rapid elimination of the disease through mass treatment campaigns. Azithromycin has been extensively used in trachoma and its safety is well-documented.

¹ Report: Informal consultations on endemic treponematoses, 6-7 July 1995, page 10

² Anselmi, M., Moreira, J.-M., Caicedo, C., Guderian, R. and Tognoni, G. (2003), Community participation eliminates yaws in Ecuador. *Tropical Medicine & International Health*, 8: 634–638.

³ Oriol Mitjà, Russell Hays, Anthony Ipai, et. al. Single-dose azithromycin versus benzathine benzylpenicillin for the treatment of yaws in children in Papua New Guinea (2012): an open-label, non-inferiority, randomised trial. *The Lancet* Jan 2012

Serological tests for treponemal infections are widely available to support diagnosis, surveys to assess the disease burden, and measurement of the impact of mass treatment campaigns.

Yaws elimination is possible – humans are the only reservoir of infection. Therefore, by treating infected people (clinically obvious cases) and those harbouring the organism (contacts), transmission can easily be interrupted. According to the WHO roadmap for NTDs, the target date of yaws elimination is 2020.⁴

In the context of the WHO roadmap and in light of the new findings with azithromycin, WHO is organizing this consultation to develop an accelerated plan for the elimination of yaws.

Objectives:

1. To review the epidemiological situation on yaws in different regions and identify gaps.
2. To analyse the implications of the Lancet publication on azithromycin in yaws elimination efforts.
3. To develop criteria and process for yaws elimination, and outline implementation plans.
4. To explore the collaboration of relevant NTDs programmes especially trachoma.
5. To identify potential donors and partners to support yaws elimination.

Expected outcomes:

1. Epidemiological situation in different regions is updated.
2. Agreement and modalities using azithromycin in mass treatment campaigns to eliminate yaws are reached.
3. Criteria and process for elimination of yaws defined, and plans for implementation developed.
4. Possible areas for collaboration with different NTDs programmes identified.
5. Potential donors and partners for yaws elimination also identified.

Follow-up

Short-term follow-up

- Finalize and disseminate the meeting report to endemic countries and potential interested partners.
- Support endemic countries to develop or revise elimination plans in accordance with the outcome of the meeting.
- Mobilize resources to implement the recommendations.

Medium and long-term follow-up

⁴ Roadmap for NTDs 2012–2020

- Develop the necessary technical and information materials to support the implementation of activities.
- Mobilize resources to sustain the elimination efforts.

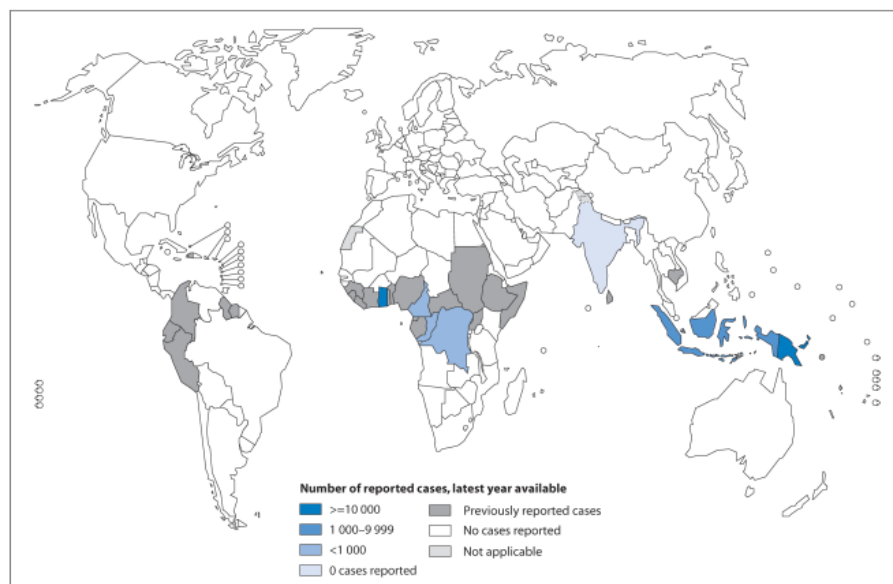
Method of work

Plenary presentations and discussions

Background documents

1. Powerpoint presentations
2. Annual yaws reports from participating countries
3. Regional elimination plans from SEARO and WPRO
4. Handbook on Endemic Treponematoses (published in 1984)
5. Preventive chemotherapy in human helminthiasis
6. Zithromax in the elimination of blinding trachoma: a programme manager's guide
7. Reference articles
8. WHO/NTD roadmap 2012–2020
9. Narain JP. Eradicating and eliminating infectious diseases: Past, Present and Future. Indian J Public Health 2011;55:81-7

Distribution of endemic treponematoses, worldwide, 2010



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 the World Health Organization 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. © WHO 2011. All rights reserved

Data Source: World Health Organization
Map Production: Control of Neglected Tropical Diseases (NTD)
World Health Organization

Annex 2. Endemic Treponematoses estimates in 1995⁵

ENDEMIC TREPONEMATOSSES ESTIMATES

Groupings	Deaths	Disabled	Cases		Carriers	Infected	Pop. at risk
			New*	All			
Global							
Male		130,000	230,000	1,300,000			17,000,000
Female		130,000	230,000	1,300,000			17,000,000
Total		260,000	460,000	2,600,000			34,000,000
Age-groups							
Total		260,000	460,000	2,600,000			34,000,000
0-14		65,000	400,000	1,000,000			23,000,000
15-24		78,000	50,000	1,000,000			11,000,000
25-64		91,000	10,000	400,000			
Males							
Females							
>64		26,000	-	200,000			
WHO Regions							
AFR		225,000	400,000	2,000,000			20,000,000
AMR		1,000	2,000	20,000			2,000,000
EMR		2,000	4,000	40,000			1,000,000
EUR		-	-	-			-
SEAR		30,000	50,000	500,000			10,000,000
WPR		2,000	4,000	40,000			1,000,000
Level of development							
Developed		-	-	-			-
Econ. in trans.		-	-	-			-
Dev.-ing.		65,000	175,000	1,000,000			13,000,000
LDCs		195,000	285,000	1,600,000			21,000,000

*New cases: prevalence of infectious cases (used for planning and evaluation of control programmes)

⁵ Report: Informal consultations on endemic treponematoses, 6-7 July 1995, page 10
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