

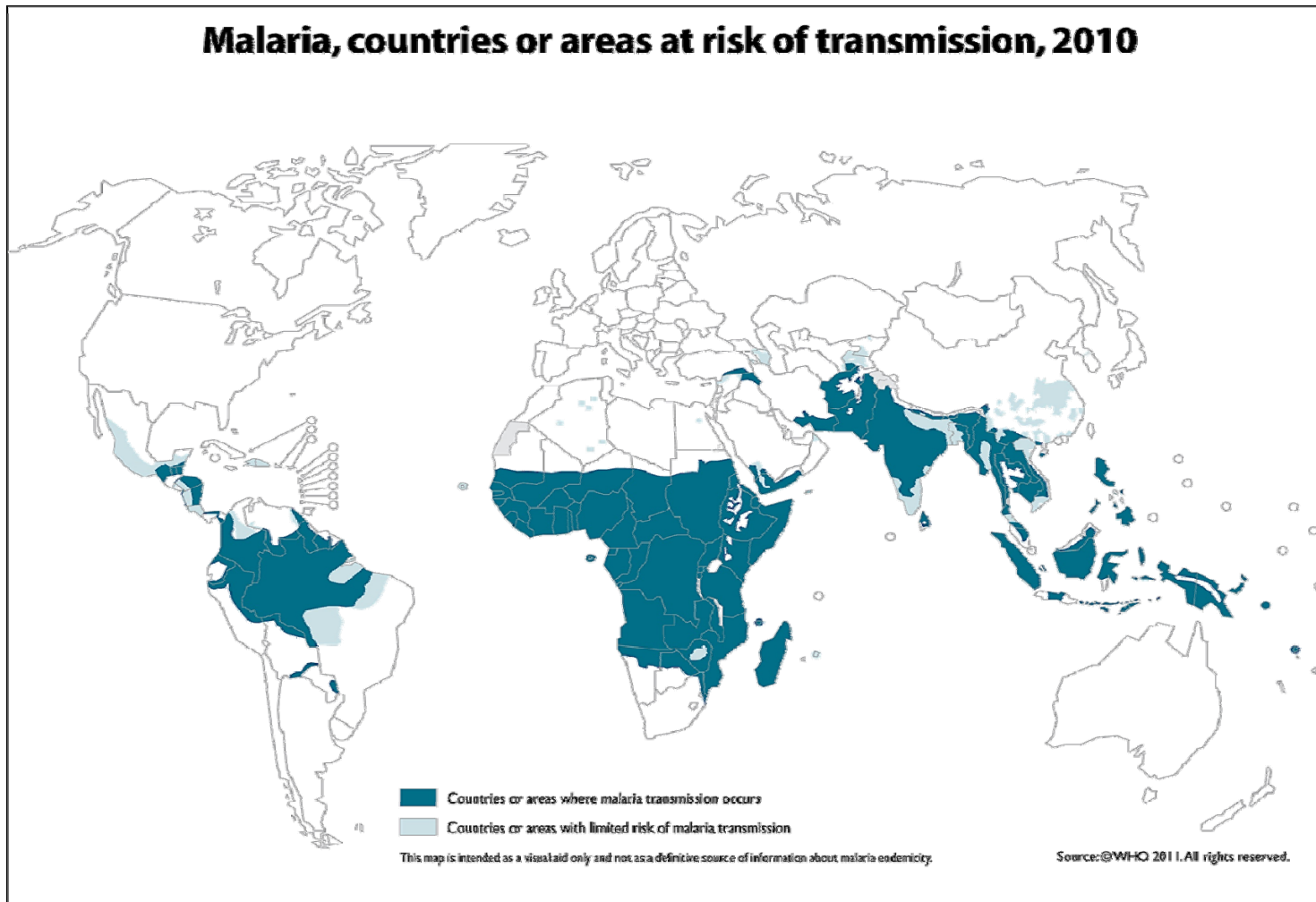
Malaria Elimination from Asia/Pacific Areas



Shigeyuki Kano

Department of Tropical Medicine and Malaria
Research Institute,
National Center for Global Health and Medicine

99 countries and territories are endemic
219 million (154-289, 5-95th centiles) episodes (81% in Africa)
660,000 (490,000-836,000, 5-95th centiles) death,
(86% were children < 5 yo), estimated in 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.

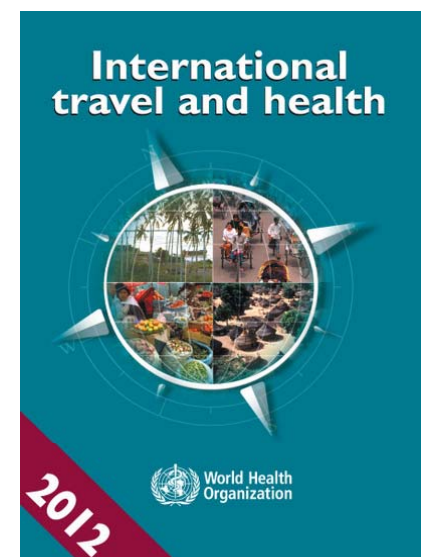
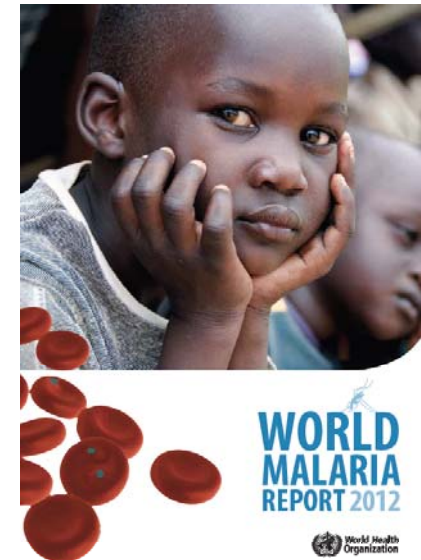


TABLE 7.2.

Estimates of malaria cases and deaths by WHO Region, 2010

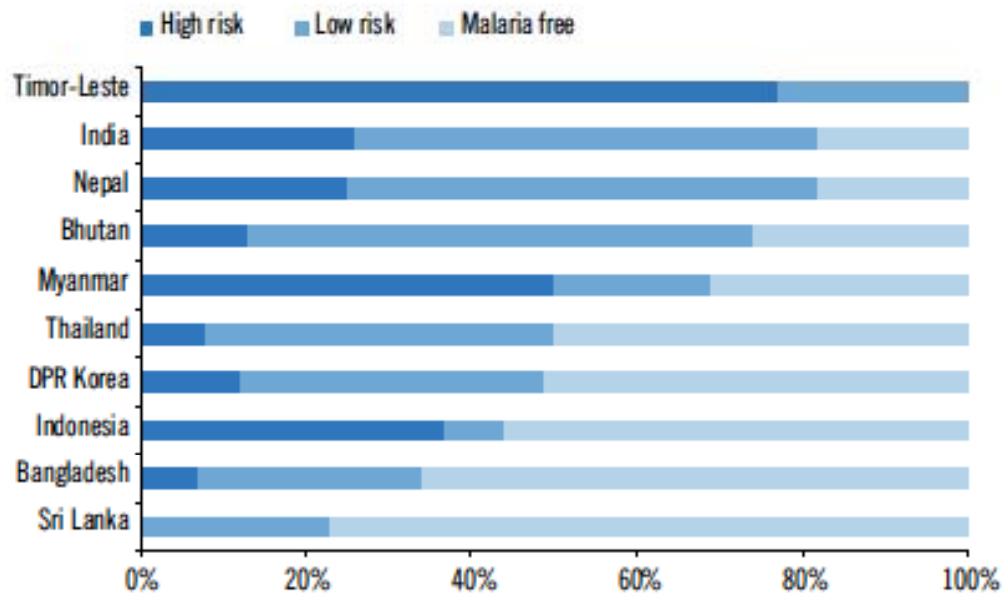
Region	Estimated cases ('000s)			% <i>P. falciparum</i>	Confirmed cases reported	Reported/estimated
	Estimate	Lower	Upper			
Africa	174 000	113 000	239 000	98%	20 000	11%
Americas	1 000	1 000	1 000	34%	1 000	59%
Eastern Mediterranean	10 000	8 000	14 000	82%	1 000	10%
Europe	0.2	0.2	0.2	5%	0.2	85%
South-East Asia	28 000	23 000	35 000	54%	2 000	9%
Western Pacific	2 000	2 000	2 000	77%	257	13%
World	216 000	149 000	274 000	91%	24 000	11%

Region	Estimated deaths			% <5
	Estimate	Lower	Upper	
Africa	596 000	468 000	837 000	91%
Americas	1 000	1 000	2 000	29%
Eastern Mediterranean	15 000	1 000	38 000	60%
Europe	0	0	0	4%
South-East Asia	38 000	28 000	50 000	31%
Western Pacific	5 000	3 000	6 000	41%
World	655 000	537 000	907 000	86%

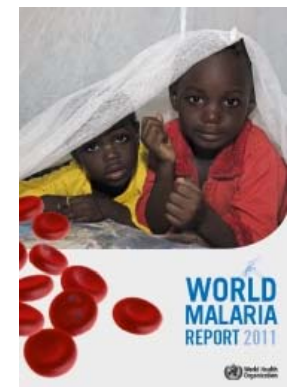
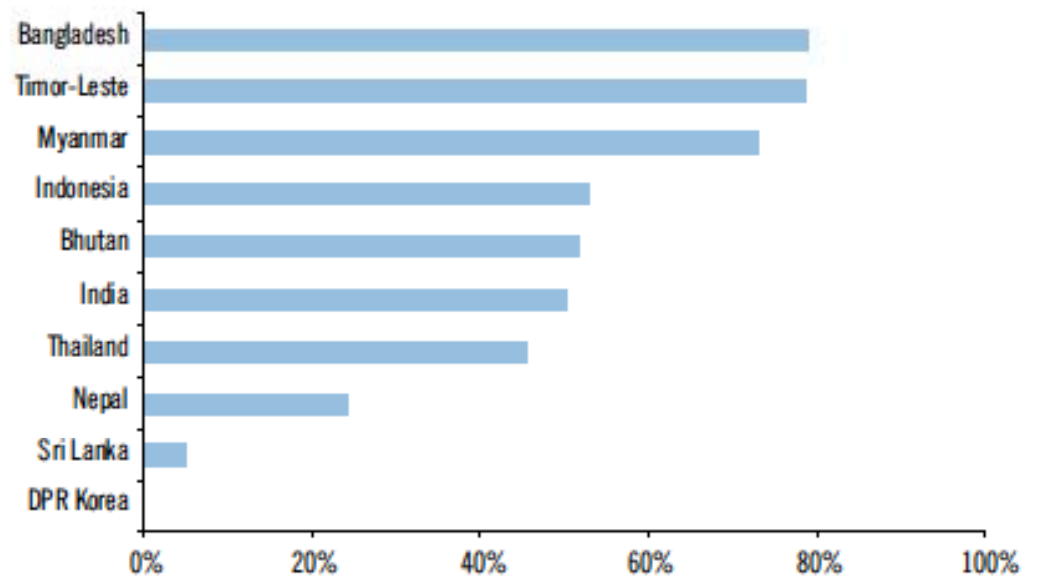


Southeast Asia

a) Population at risk, 2010

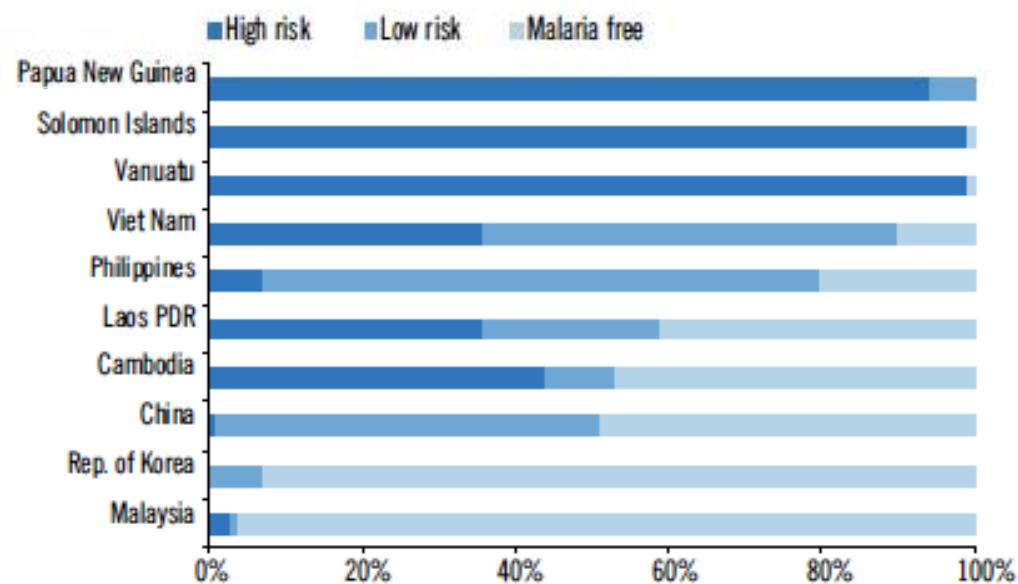


b) Percentage of cases due to *P. falciparum*, 2006-2010

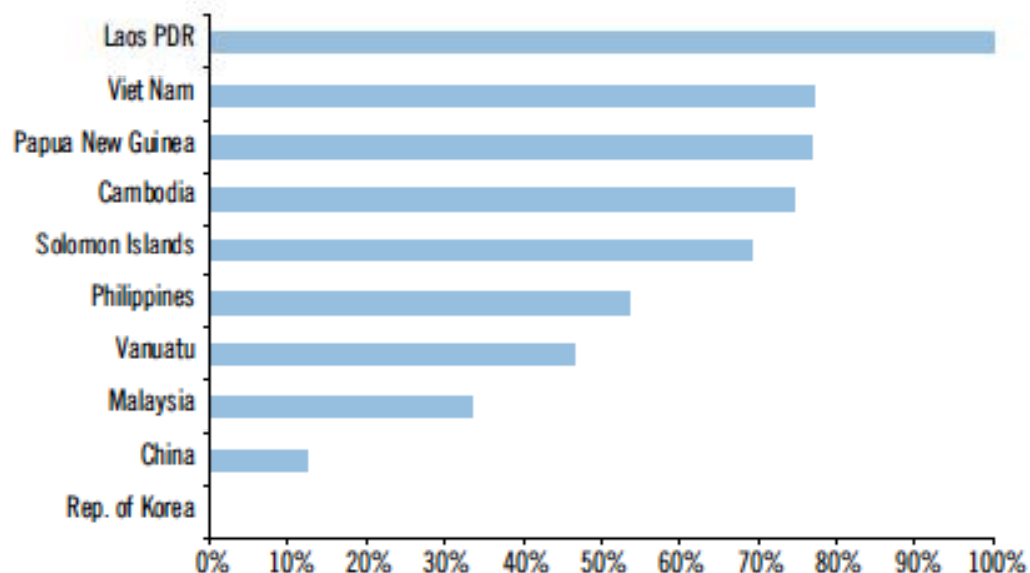


West Pacific

a) Population at risk, 2010



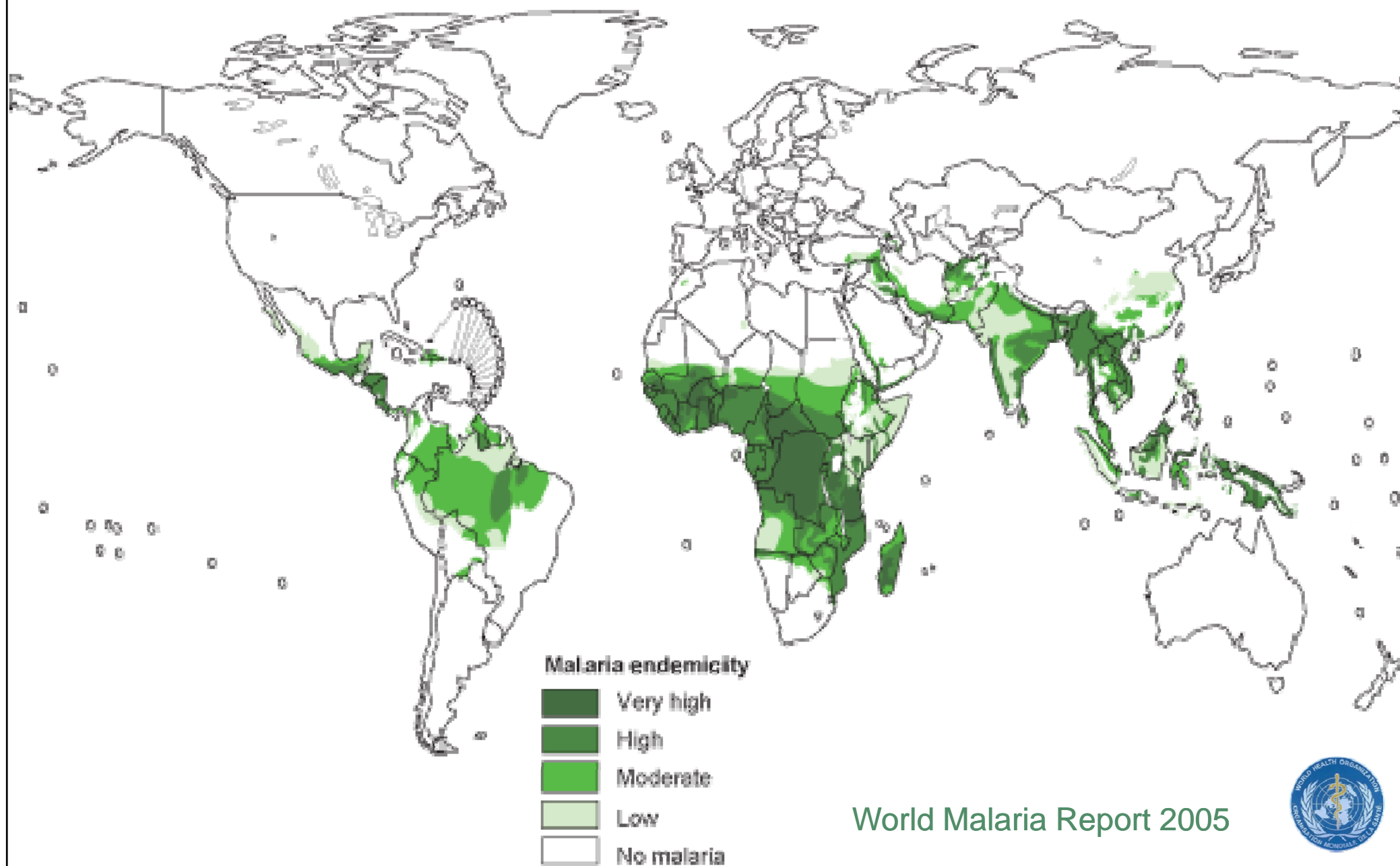
b) Percentage of cases due to *P. falciparum*, 2006-2010

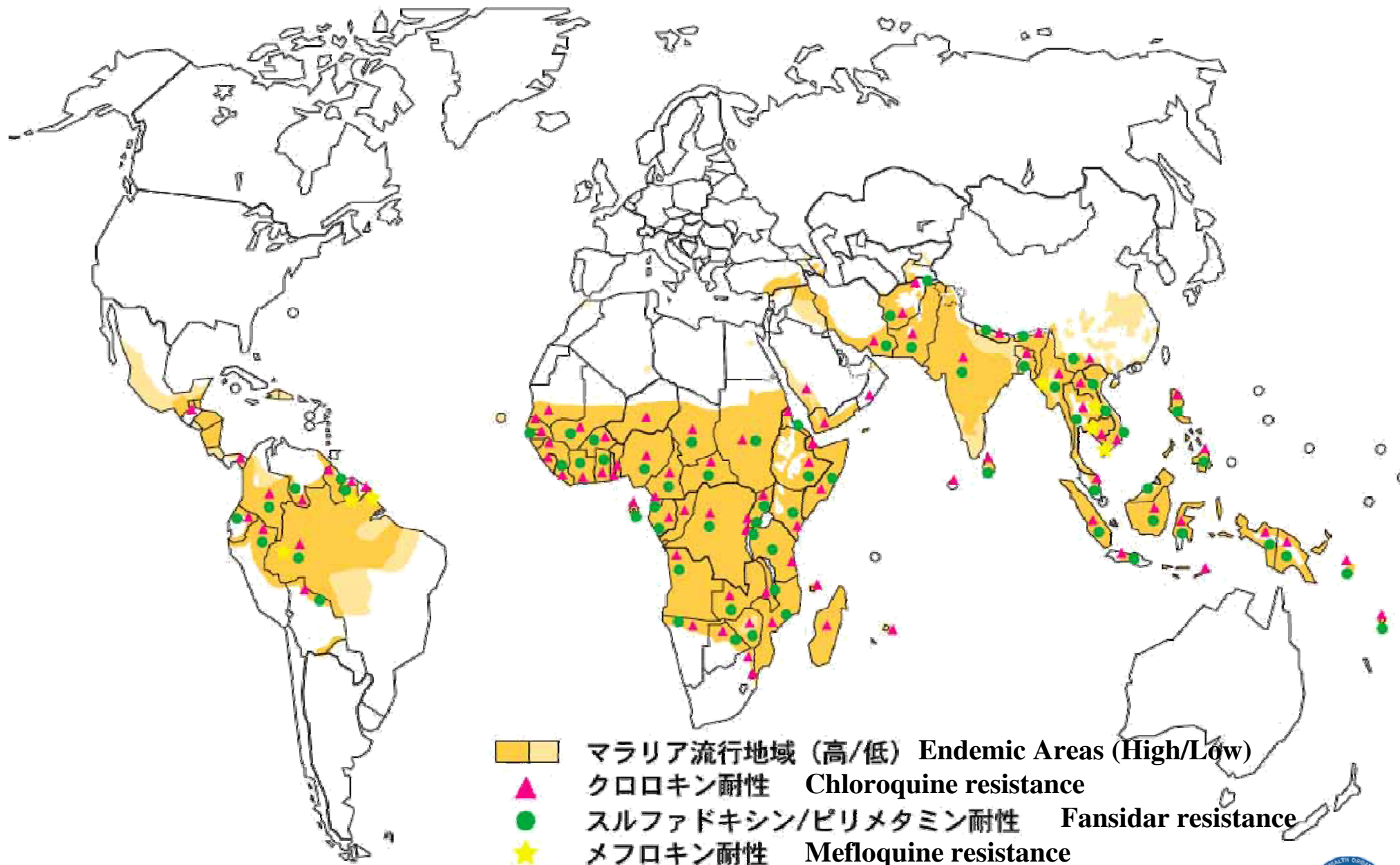


In Asia and West Pacific, burden of malaria is much higher than you may have expected



Malaria endemicity in the world



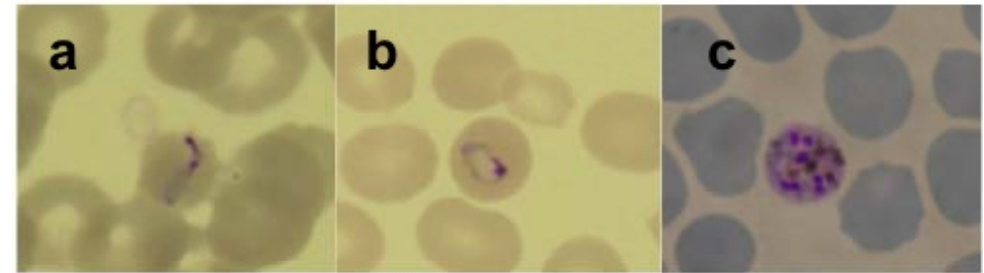




The Case

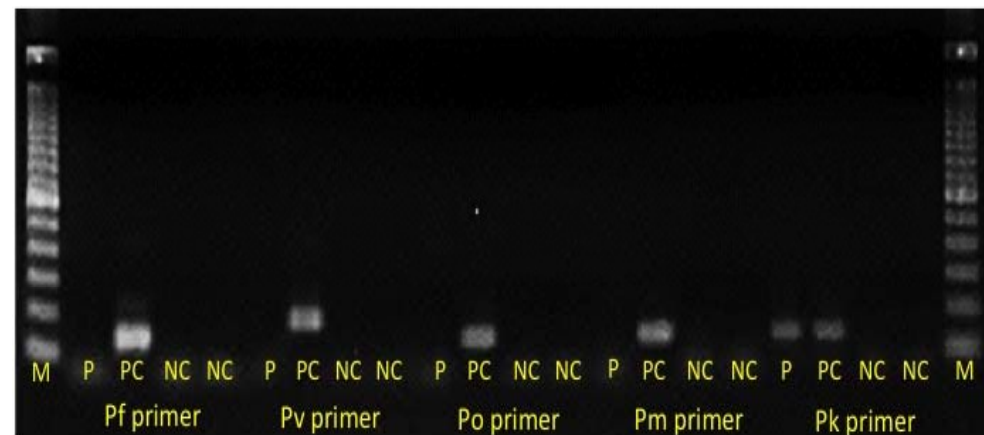
In September 2012, a previously healthy 35-year-old Japanese man presented to the travel clinic in National Center for Global Health and Medicine, Tokyo with a 2-day history of daily fevers, mild headache, and mild arthralgia. He had visited Malaysia for entomological and botanical field investigations over a 2-month period and had stayed at Temengor (4 weeks), Johor (2 weeks), and Kuala Lumpur (2 weeks). While in Temengor, he stayed in a tent located near a forest and had not used any malaria prevention measures such as bed nets, mosquito repellents, or chemoprophylaxis. During his stay, he was bitten by mosquitoes and saw some wild monkeys. He had no health problems and was in a good physical condition until he experienced a sudden high fever (39.0° C axillary temperature) the day after his return to Japan. He had fever spikes of $>38.0^{\circ}$ C in a 24-hour period. On the 3rd day of his illness, he was admitted to our hospital.

(A) Before administration of mefloquine



This is the 1st reported case of imported human *P. knowlesi* infection in Japan. *P. knowlesi* infection might be more popular among travelers returning from Southeast Asia than previously thought. (ProMED-mail)

Ryutaro Tanizaki, Mugen Ujiie, Yasuyuki Kato, Moritoshi Iwagami, Aki Hashimoto, Satoshi Kutsuna, Nozomi Takeshita, Kyoko Hayakawa, Shuzo Kanagawa, Shigeyuki Kano, Norio Ohmagari: First case of *Plasmodium knowlesi* infection in a Japanese traveller returning from Malaysia. **Malaria Journal** 12:128, 2013





1992 Malaria Summit

1997 Hashimoto Initiative


1998 Roll Back Malaria

2000 Okinawa ID Initiative

2002 Global Fund to Fight ATM



1992 Malaria Summit

- 
- Integration of malaria control program into the general health promotion planning
 - Change of strategy from vertical to horizontal way
 - Malaria control campaign through community participation



Community-based PHC



Palawan

The Philippines



NCGM
National Center for Global Health and Medicine



Health Center at Barangay Mangingisda, Palawan





BHC activities



Community participation



Bednets impregnation

Mosquito control

Environmental Cleaning



Malaria Free Day



Malaria Free Day



Free blood smearing



Free lectures





GOVERNMENT OF PALAU
MUGAN LIGTAS MALARIA
BARANGAY MICROSCOPIST
TRAINING COURSE

MUGAN LIGTAS MALARIA

MONTH OF FEBRUARY 2002

From 10:00 AM - 12:00 PM (If all year work is done by 10:00 AM, use the next day's work for a night)

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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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→ KNOWN slides ←

→ KNOWN slides w/ evaluations ←

MONTH OF MARCH 2002

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→ KNOWN slides w/ evaluation ←

→ UNKNOWN slides series ←

→ UNKNOWN slides ←

• Field Trip

• Preparation for evaluation

• Graduation

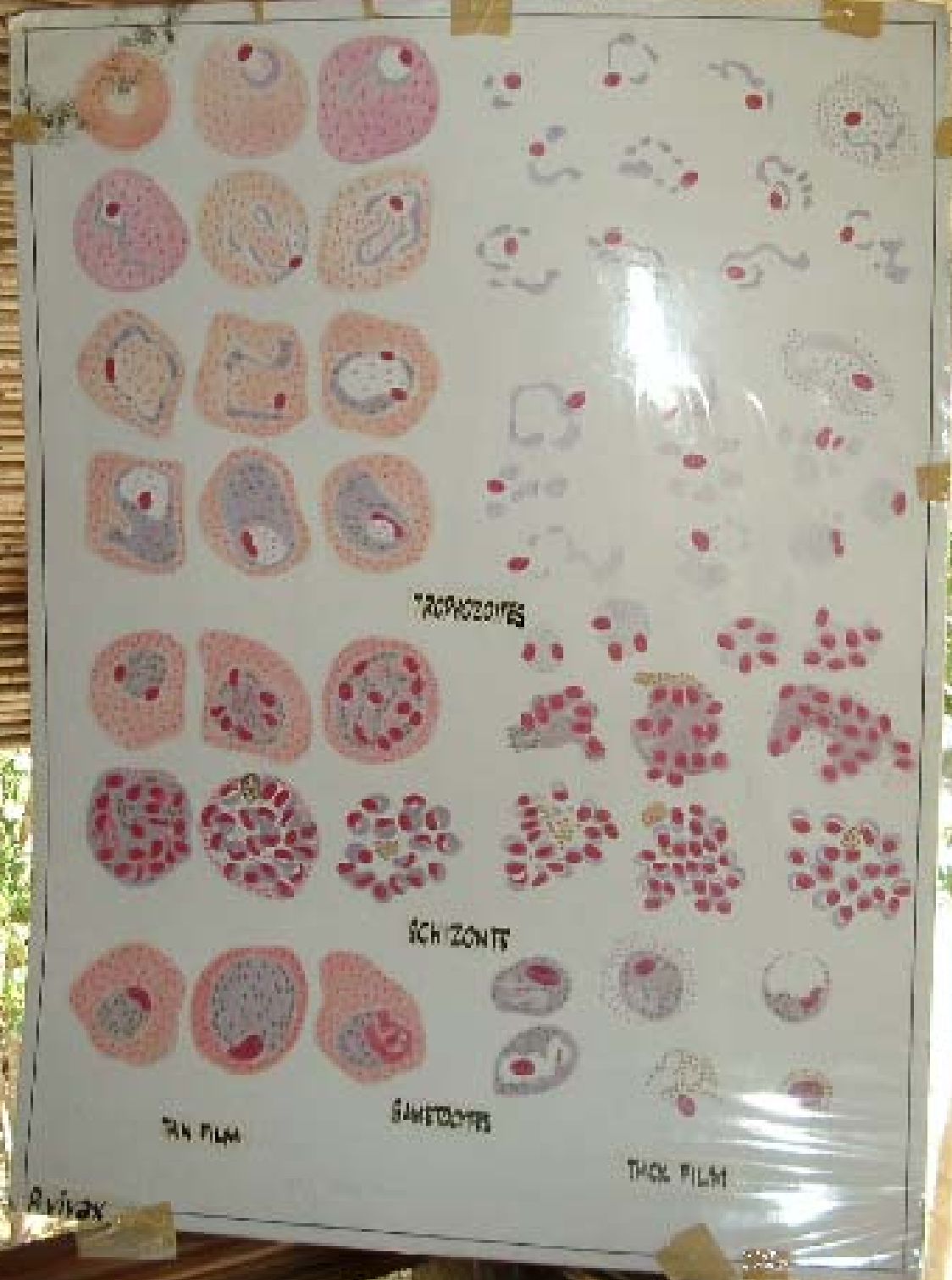
- 1. Multi-Pass
- 2. low sq of evaluation
- 3. distribution of job
- 4. site meetings
- 5. Multi-Pass
- 6. low sq of evaluation
- 7. distribution of job
- 8. site meetings
- 9. Multi-Pass
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- 31. distribution of job
- site meetings



WELCOME
GUEST and PARTICIPANTS
MALARIA MICROSCOPY *Training Course*
SAN VICENTE, PALAWAN
FEB. 4 - MARCH 22, 2002







TROPHOZITES

ICHOZONTE

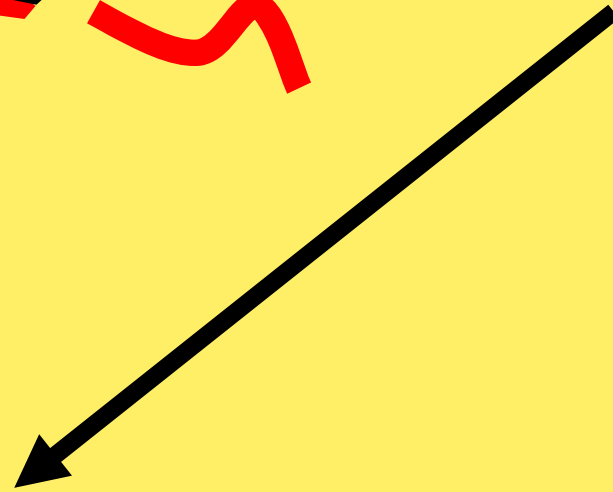
GAMETOCYTES

THIN FILM

THICK FILM

Amixax

*Microscopists training
in the Philippines*



Early diagnosis

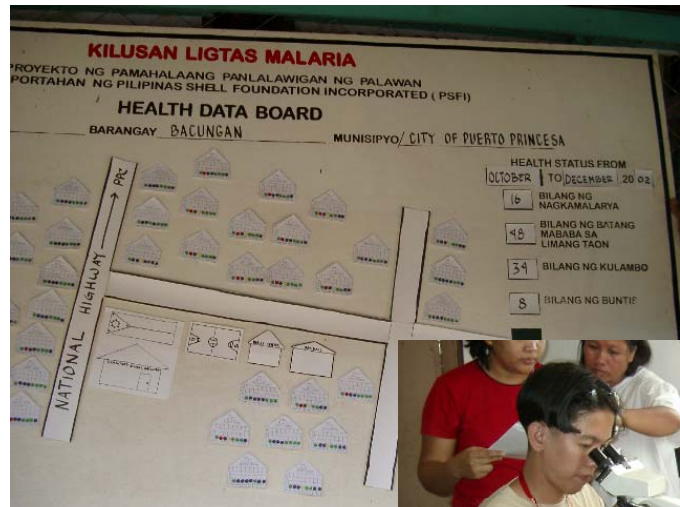
Proper treatment





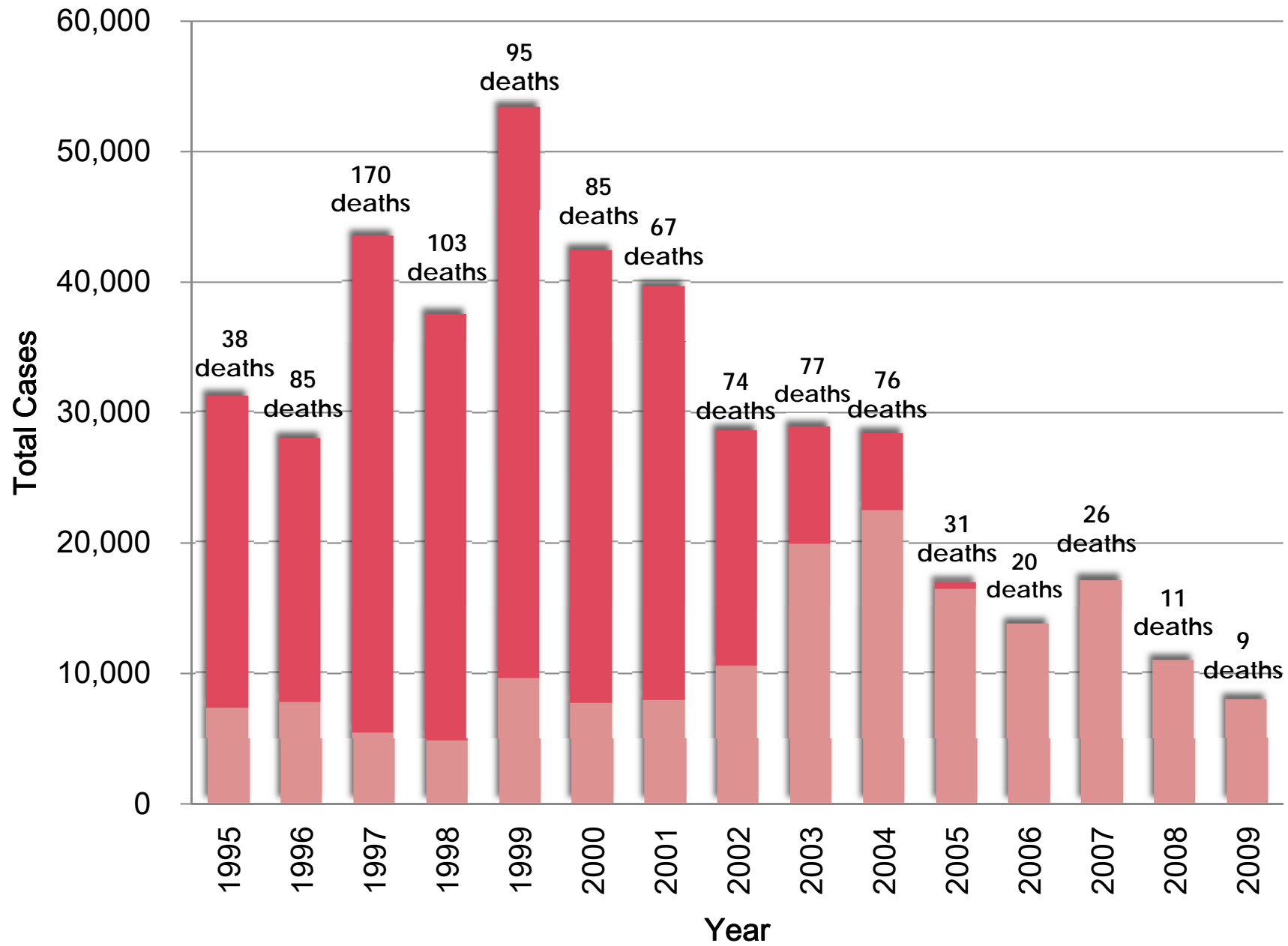
- **344 were trained and 274 (80%) remain active**
- **Regular monitoring of their performance by an established QA system showed 86-100% accuracy in reading slides**





Malaria Awareness Day

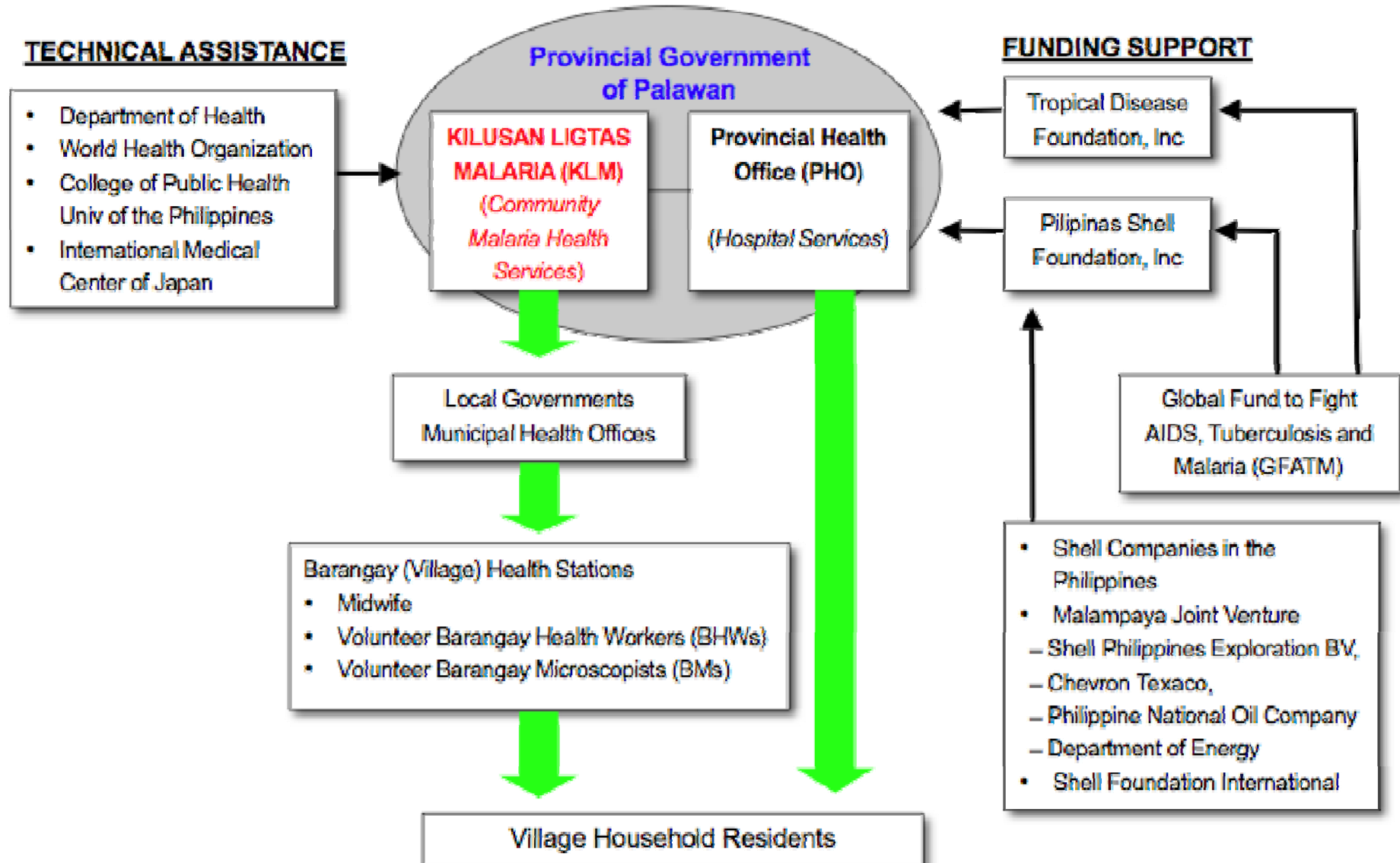




■ Diagnosed thru signs and symptoms only
 ■ Confirmed thru Microscopy



SERVICE DELIVERY



1992 Malaria Summit

1997 Hashimoto Initiative

1998 Roll Back Malaria

2000 Okinawa ID Initiative

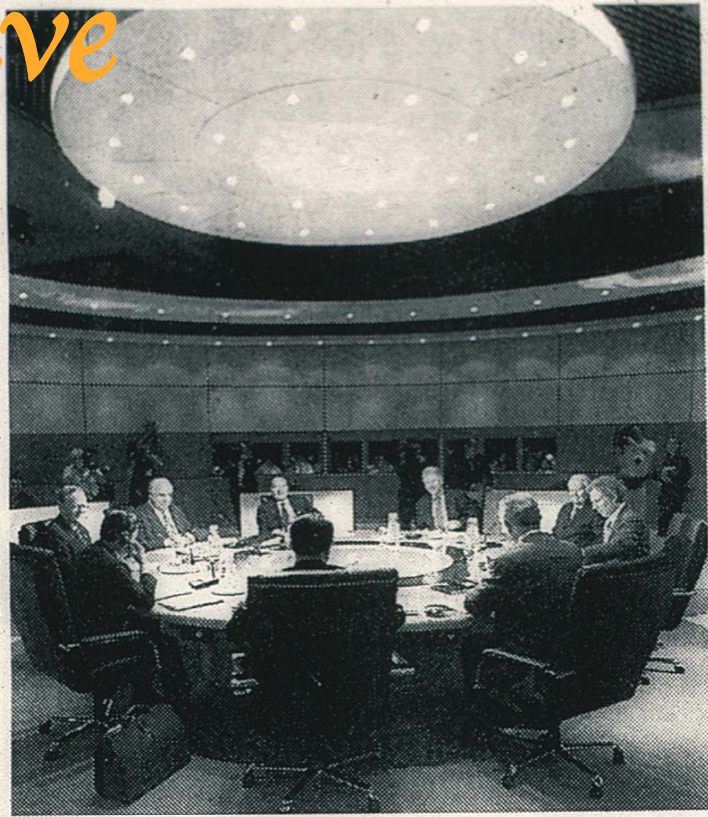
2002 Global Fund to Fight ATM

Hashimoto Initiative



**Ex-Prime Minister
Mr. Ryutaro Hashimoto**

17日のバーミンガム・サミット全体会議の
会場でテーブルにつく各国首脳（ロイター）



▽感染症及び寄生虫症に
関する相互協力を強化し、
世界保健機関の努力を支援
する。マラリアの死亡率を
二〇一〇年までに大幅に減
少させるための新たな「ロ
ールバック・マラリア」計
画を支持する。世界的なエ
イズ禍を減少させるための
努力を継続する。

1998年(平成10年)5月18日(月曜日)

読 者 新 聞

GO8宣言の要旨



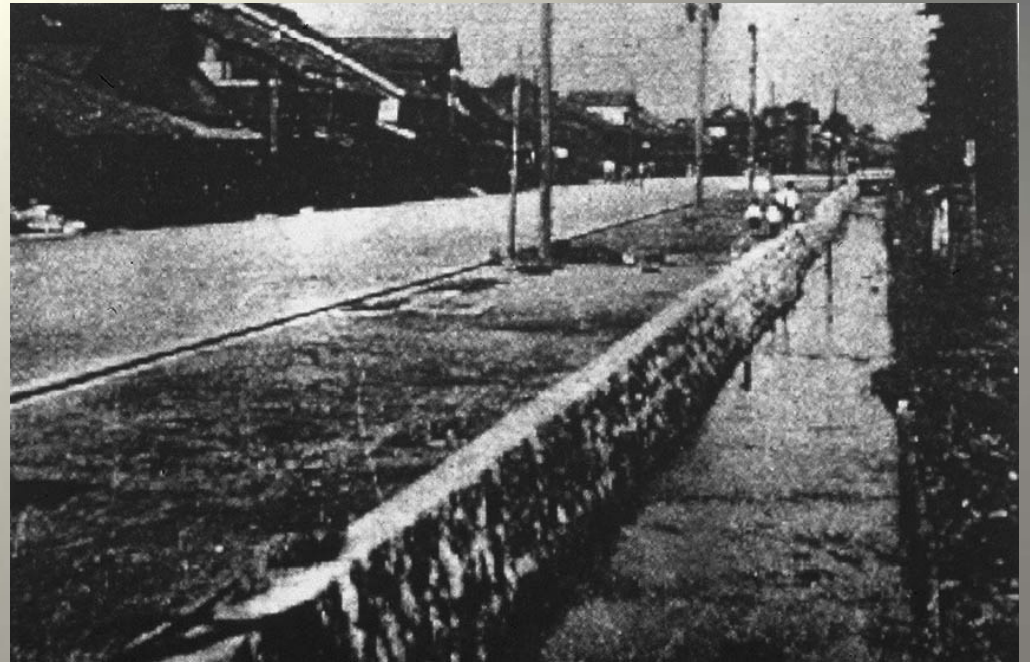
DDT Indoor Spaying



Environmetal Cleaning



Before



After



Eradiction



Malaria

昭和25年

1950

彦根市

Hikone City

Malaria Awareness Week in Hikone City



Malaria Free Campaign



教育委員会看板

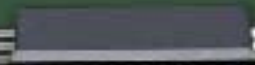


マラリア予防委員会 (丸美百貨店三階)



Global Parasite Control Strategies

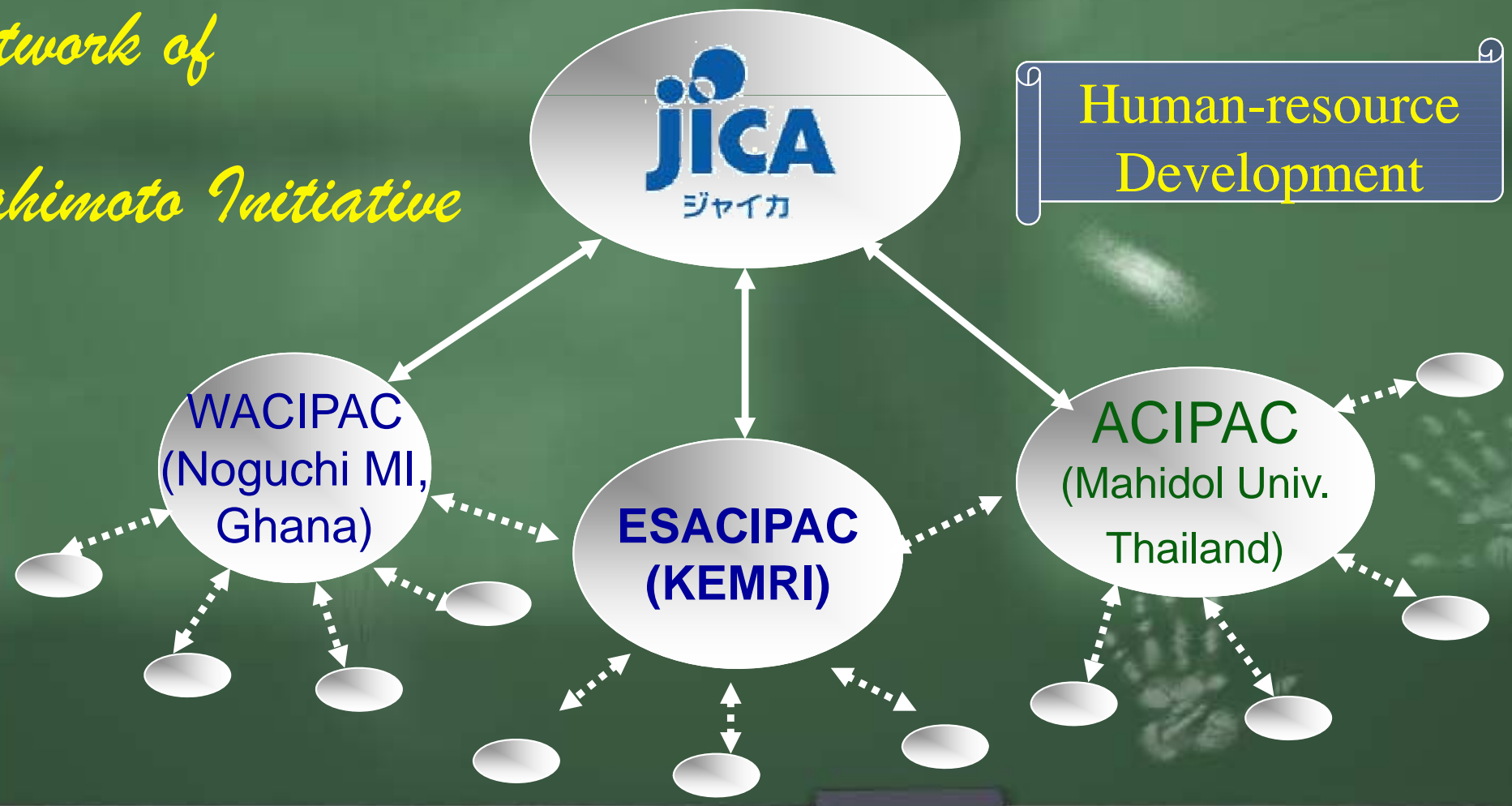
- Effective international cooperation for the efficient implementation of parasite control
- Active pursuit of research that provides a scientific basis for parasite control
- Active implementation of effective parasite control projects
- Strengthening of the G8 countries' capabilities to deal with parasitic diseases



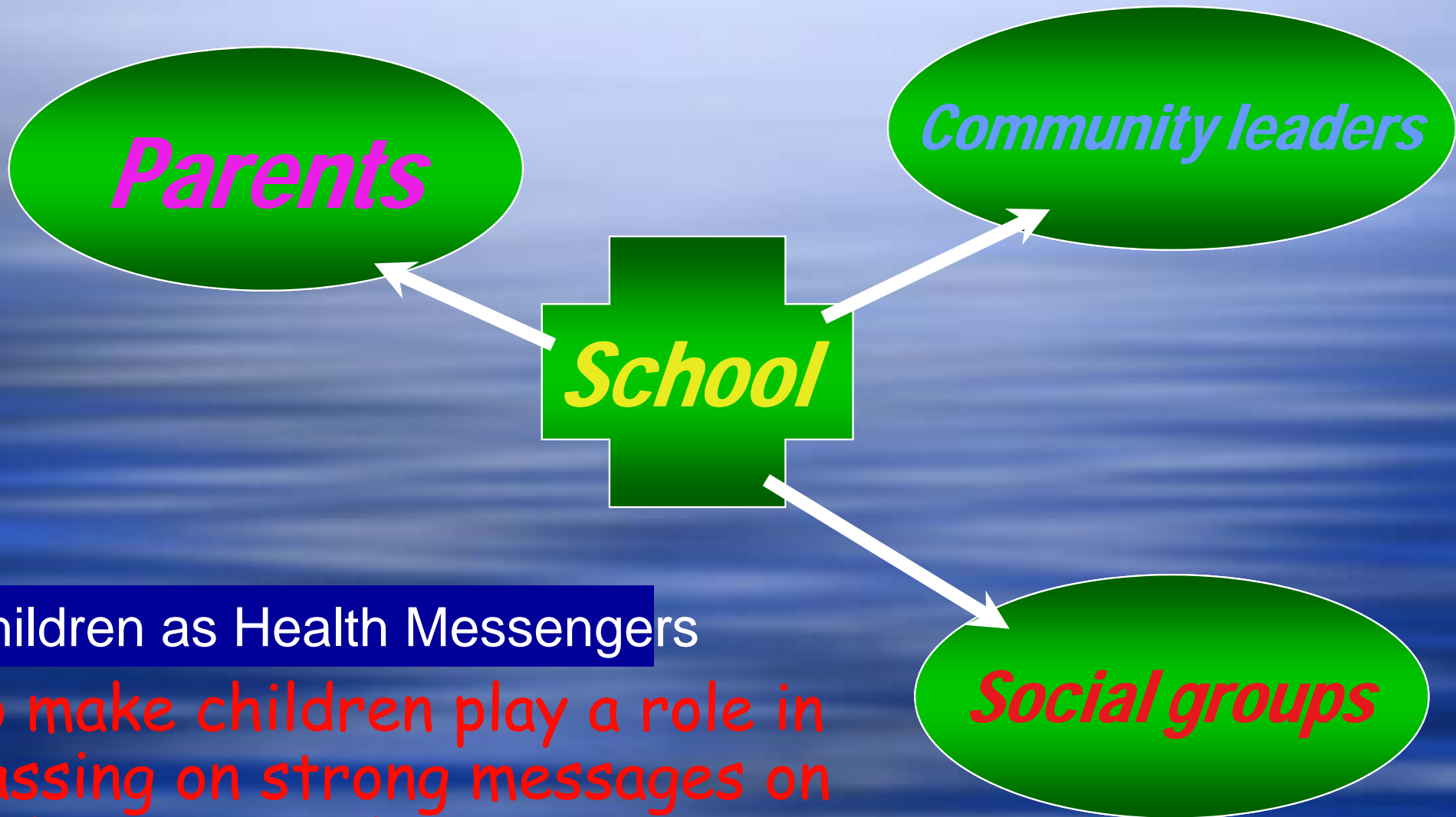


*Network of
Hakimoto Initiative*

Human-resource
Development



*Malaria Control
Through
School-health based approaches*



Children as Health Messengers

to make children play a role in passing on strong messages on malaria control to their families and community





ประเทศไทยมีก๊ซนิต

มาลาเรีย เป็นสัตว์เซลล์เดียว เรียกว่า
 ก๊ซนิต เชื้อมาลาเรียในเมืองไทย มี

(พลาสโมเดียม ฟัลซิพารัม)
 ที่รักษาไม่ทันเวงที่ อาจถึง

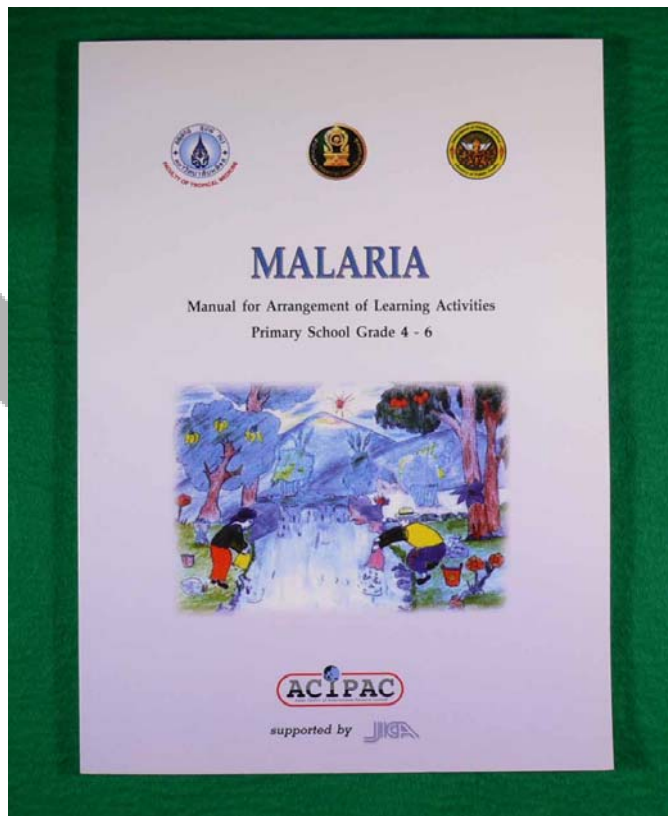
เสียชีวิต (ในวัยเด็ก) ผู้ป่วยจะ
 มีไข้สูง เชื้อนี้จะสามารถ



ใช้มาลาเรีย จะเจริญอยู่ในตัวยุงประมาณ 10 วัน
 เมื่อยุงนั้นไปกัดคน ก็จะถ่ายเชื้อมาลาเรียผ่าน
 น้ำลายยุงเข้าสู่กระแสเลือดของคน



นอนในมุ้ง หรือมุ้งชุบน้ำยา



The malaria patient will die if treatment is too late.

Learning content Hygiene education and physical education
 Learning Plan Malaria
 Learning unit 1 Look through
 Primary school level 4 5 6
 1 Activity 1 Hour

1. Learning outcome
 Know and understand the cause, symptom, and treatment so that you have malaria

2. Main points
 When you have the suspected symptom of malaria, you have check blood. If you have malaria infected

3. Specific objectives

1. Tell cause, symptoms of malaria
2. Act as malaria patient.
3. Explain how to take care malaria patient
4. Create questionnaire

4. Learning content

1. Cause of malaria
2. Symptom of malaria patient
3. How to take care malaria patient.

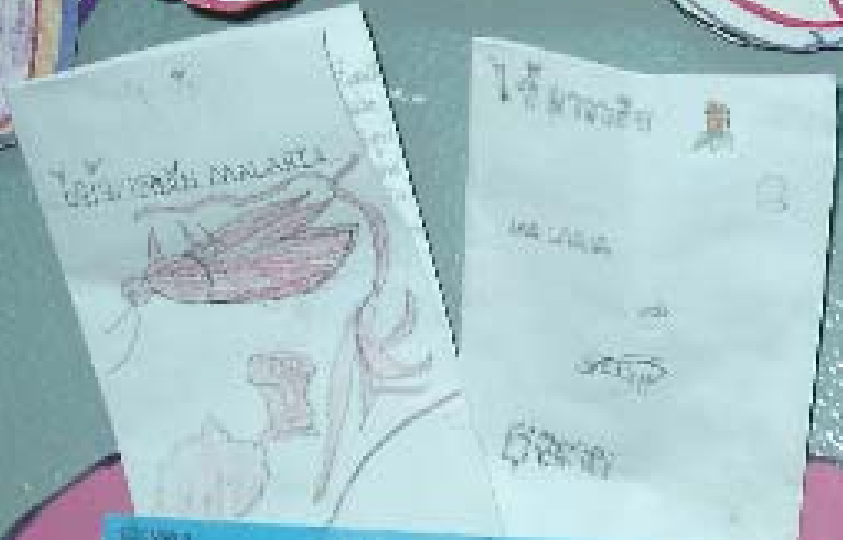
5. Learning process (Activity)
 Activity 1
 Activity 2













Changes of behaviors

- The teachers taught about malaria more actively than before.
- The teachers who could design a lesson plan on malaria increased from 30.7% to 47.7% ($p=0.015$)
- The teachers who had taught about malaria increased from 71.9% to 84.3%.
- The school children changed their behavior positively towards malaria prevention
 - Those who always took care of mosquito bites increased from 42.7% to 62.1% ($p<0.001$)
 - Those who always reported their parents or teachers when they had fever increased from 36.0% to 56.0% ($p<0.001$)

Okabayashi H, Thongthien P, Singhasivanon P, Waikagul J, Looareesuwan S, Jimba M, Kano S, Kojima S, Takeuchi T, Kobayashi J, Tateno S: Keys to success for a school-based malaria control program in primary schools in Thailand. Parasitol Int 55(2):121-126, 2006

Japan's strategy for global health diplomacy: why it matters

Global health is standing at a crossroads. The past decade has been a glorious period for global health because aid to the health sector has surged, and newly formed public-private partnerships have increased the effectiveness of development assistance.¹ Japan has played a significant part, for example by leading discussions at the G8 Kyushu-Okinawa Summit in 2000 and by helping in the establishment of the Global Fund to Fight AIDS, Tuberculosis and Malaria. However, countries now face changing disease structures, and non-communicable diseases are a global threat.² If the world follows the existing disease-focused vertical pathway for development assistance in the coming years, the disparity between resource allocation and actual disease burdens will widen. The disease-specific approach is straightforward, but the importance of tackling health in general is clear.³

At the G8 Hokkaido Toyako Summit in 2008, Japan proposed a comprehensive approach to health, inclusive of health system strengthening, to complement a vertical approach.⁴ A working group led by Keizo Takemi supported the work of the G8 Health Experts Group by recommending actions.⁵ Unfortunately, because of the financial crisis that began in 2008, there have been difficulties in sustaining the amount of aid for health.⁶

We should now pursue universal health coverage (UHC) to solve existing global health challenges and to embark on the post-2015 development agenda. UHC would help us to reach three goals. The first of these goals is to improve the health of countries' entire populations,⁷ including the most vulnerable people, women in particular.⁸ The existing Millennium Development Goals (MDGs) stop short of addressing widening domestic inequalities, and it is crucial to close the gap in access to health services between wealthy and poor people. The second goal is to ensure health service provision for all people, shifting from a disease-oriented to a people-centred approach.⁹ UHC can meet the wide-ranging health needs of every person. These two goals are interrelated and together help to achieve human security through protection and empowerment of individuals. The third goal is to enable countries to look at their own challenges and implement health policies that fill diversified needs with a limited budget.¹⁰ UHC can be a powerful way to reinforce

country ownership and setting of priorities in search of value for money.¹¹

This new pathway for global health is still at an early stage and needs strong political leadership, which is why I launched the Strategy on Global Health Diplomacy in May, 2013.¹² With this strategy, I first and foremost spare no efforts to incorporate UHC as a crucial element of the post-2015 development agenda. UHC is gaining a footing in the global health dialogue. The Foreign Policy and Global Health initiative led a resolution on UHC, which was adopted at the 67th UN General Assembly.¹³ I agreed with President François Hollande of France, who leads this initiative, to promote UHC.¹⁴

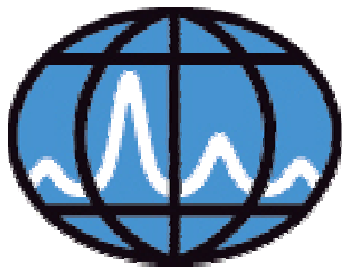
Second, I will reinforce Japan's assistance to developing countries to work with them to achieve UHC. Promotion of UHC does not mean a reduction of aid in the health sector or ignorance of the unfinished work of the MDGs. With regard to Africa, our work on MDGs opens the door towards UHC. At the 5th Tokyo International Conference on African Development (TICAD V) held in June, 2013, I called for the promotion of UHC¹⁵ and committed US\$500 million of financial assistance in health, including capacity building of a 120 000-strong health workforce.¹⁶

To turn our attention to Asia, Japan and the Association of Southeast Asian Nations (ASEAN) are celebrating the 40th year of ASEAN-Japan friendship and cooperation this year. As a microcosm of diversifying challenges of global health, ASEAN presents an opportunity for all the stakeholders in health to work together for the health

Universal Health Coverage (UHC)



Provided by the Cabinet Public Relations Office, the Government of Japan



NCGM

National Center for Global Health and Medicine

