



REPUBLIC OF KOREA

Overview

Malaria at a Glance

Reported cases of malaria (<i>P. vivax</i> only)	1,317
Deaths from malaria	N/A
Population at risk (%) (Total population: 48.9 million)	7
Annual parasite index (cases/1,000 total population/year)	0.02
Slide positivity rate (%)	N/A

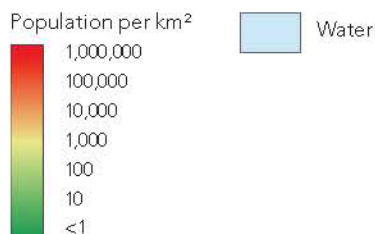
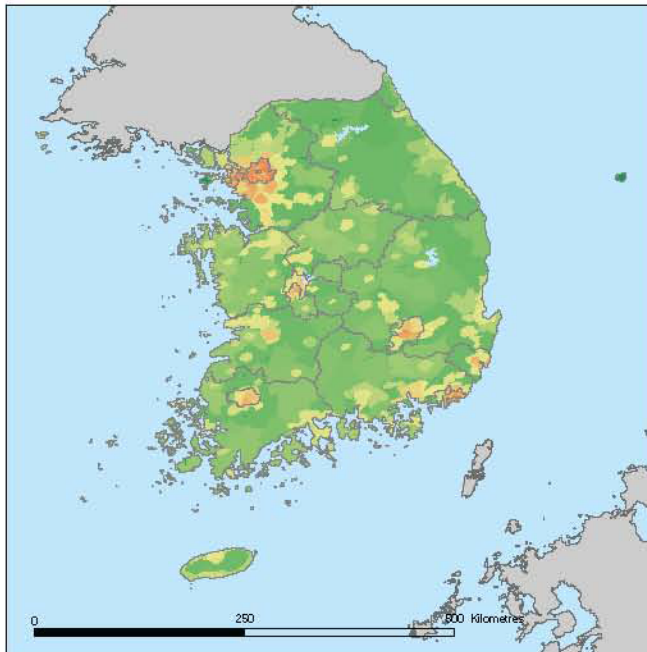
Source: WHO, World Malaria Report 2010
N/A: Data not available

Health and Economic Indicators

GNI per capita (US\$)	19,890
Country income level	High
Annual per capita health expenditure (US\$)	1,108
Total health expenditure as % of GDP	6
Private health expenditure as % of total health expenditure	46
Life expectancy (years)	80

Source: World Bank, World Development Indicators

Human Population Density

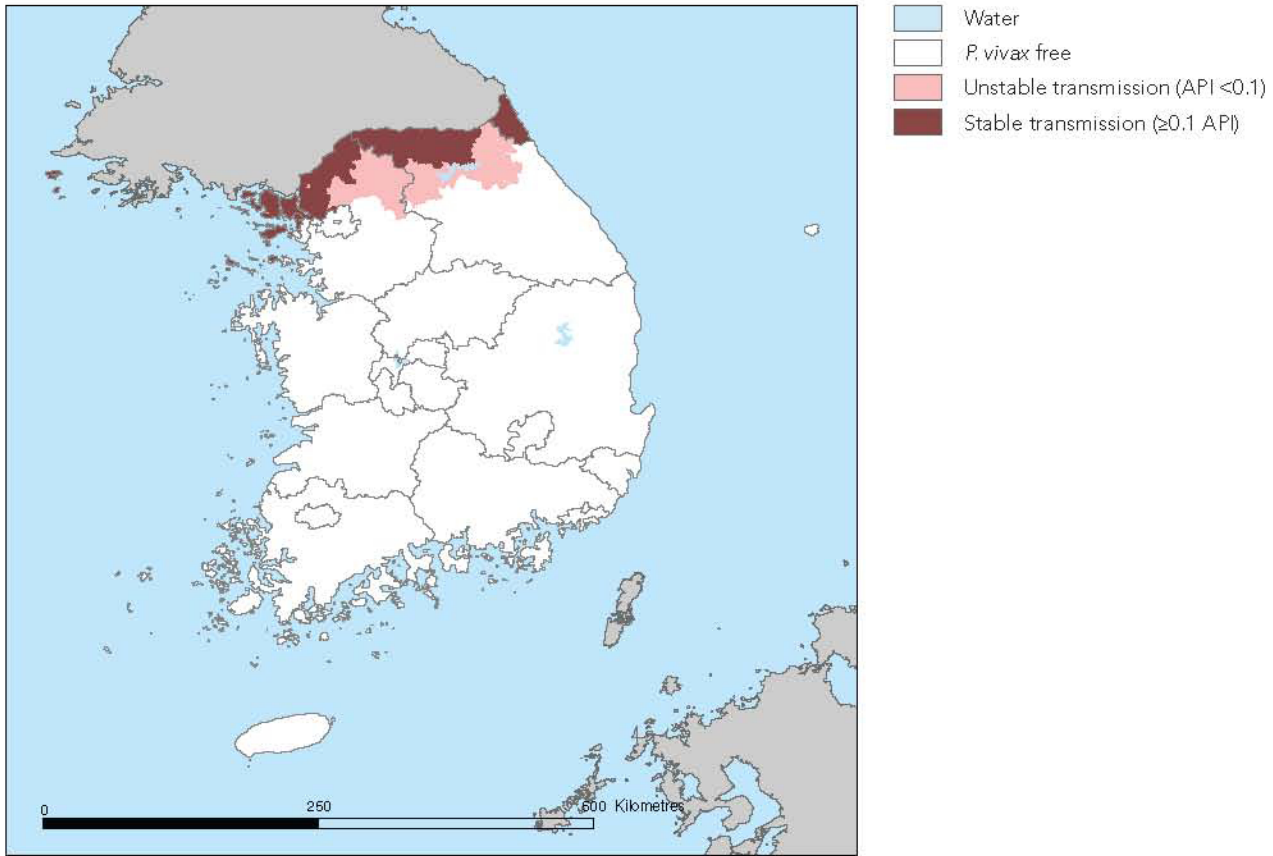


Strategic Program Goals for Elimination

- Reduce malaria incidence annually by 25% from 2010–2015
- National malaria elimination by 2015

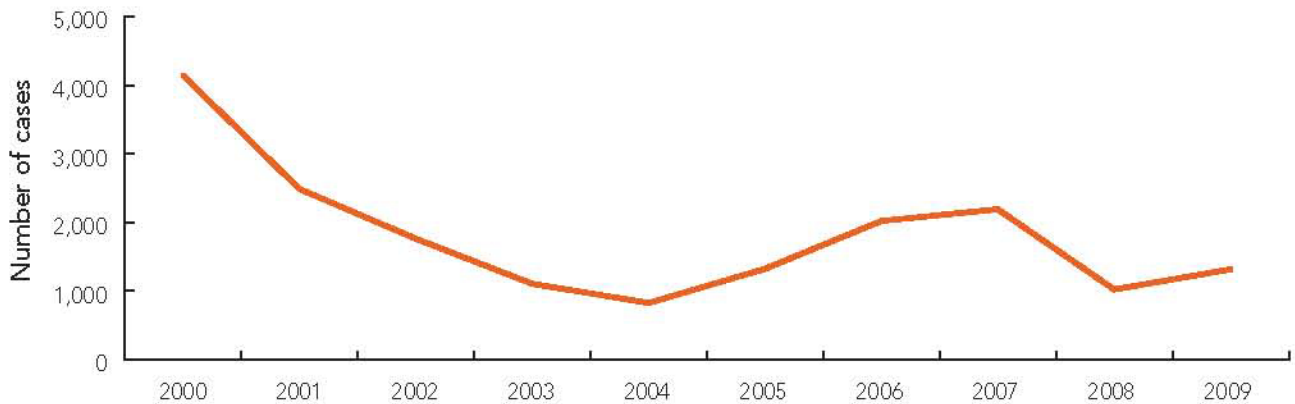
Malaria Transmission Limits

Plasmodium vivax



P. falciparum/*P. vivax* malaria risk is classified into no risk, unstable risk of < 0.1 case per 1,000 population (API) and stable risk of ≥ 0.1 case per 1,000 population (API). Risk was defined using health management information system data and the transmission limits were further refined using temperature and aridity data. Data from the international travel and health guidelines (ITHG) were used to identify zero risk in certain cities, islands and other administrative areas.

Reported Malaria Cases



Source: WHO, World Malaria Report 2010

Occurrence of Malaria Vector Species

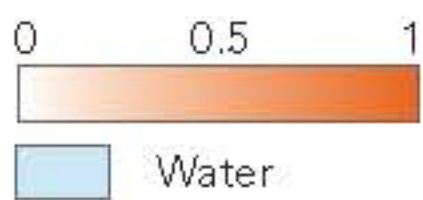
1. *Anopheles lesteri*



2. *Anopheles sinensis*



Probability of occurrence scale



These maps show the predicted probability of occurrence of each vector species.

Bionomics Vector Species Table

Species	Vector status across species range	Primary environment	Zoophilic/ anthropophilic	Endo/ exophagic	Endo/ exophilic	Biting time
<i>Anopheles (Anopheles) lesteri</i> Baisas & Hu, 1936	Important vector	Cool shady places, hills and grassy fields, fresh-water pools	Both	Data not available	Endophilic	Dusk/ night
<i>Anopheles (Anopheles) sinensis</i> species complex	Important vector of <i>P. vivax</i> malaria	Lowland fresh-water habitats with vegetation in open areas	Zoophilic	Exophagic	Exophilic	Dusk/ night

Sources

SOURCES FOR THE MAPS IN THE *ATLAS OF THE ASIA PACIFIC MALARIA ELIMINATION NETWORK, 2011*

Socioeconomic Data and Applications Center (SEDAC). <http://sedac.ciesin.columbia.edu/gpw>.

United Nations Department of Economics and Social Affairs. World Urbanization Prospects: The 2007 Revision Population Database. <http://esa.un.org/unup>.

Guerra, CA, Gikandi, PW, Tatem, AJ, Noor, AM, Smith, DL, Hay, SI and Snow, RW. (2008). The limits and intensity of *Plasmodium falciparum* transmission: implications for malaria control and elimination worldwide. *Public Library of Science Medicine*, 5(2): e38.

Guerra, CA, Howes, RE, Patil, AP, Gething, PW, Van Boeckel, TP, Temperley, WH, Kabaria, CW, Tatem, AJ, Manh, BH, Elyazar, IRF, Baird, JK, Snow, RW and Hay, SI. (2010). The international limits and population at risk of *Plasmodium vivax* transmission in 2009. *Public Library of Science Neglected Tropical Diseases*, 4(8): e774.

Sinka, ME, Bangs, MJ, Manguin, S, Chareonviriyaphap, T, Patil, AP, Temperley, WH, Gething, PW, Elyazar, IRF, Kabaria, CW, Harbach, RE and Hay, SI. (2011). The dominant Anopheles vectors of human malaria in the Asia-Pacific region: occurrence data, distribution maps and bionomic précis. *Parasites and Vectors* 4:89.

SOURCES FOR REPUBLIC OF KOREA

Strategic Program Goals for Elimination

Han-Sung L. Malaria in the Republic of Korea. Presentation at the 2nd annual meeting of the Asia Pacific Malaria Elimination Network. February 16–19, 2010, Kandy, Sri Lanka. <http://apmen.org/storage/apmen-ii/03Lee.pdf>.

Transmission Limits Maps (Data years 2005–2008)

Jung-Yeon Kim (2009), Department of Malaria and Parasitic Disease, National Institute of Health, Seoul, Republic of Korea

The Sources listed above are extracted from the following pages in the *Atlas of the Asia Pacific Malaria Elimination Network, 2011*

Methods and Sources (12)

Appendix A: Sources and Citations for the Strategic Program Goals for Elimination (59–60)

Appendix B: Annual Parasite Incidence Data Used for the Transmission Limits Maps (61)