

Review on the Epidemiological Profile of Helminthiases and their Control in the Western Pacific Region, 1997-2008

MVP/WPRO
29 April 2008

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Abbreviations

DEC	diethylcarbamazine
DOH	Department of Health
FBT	food-borne trematode
IEC	Information, education, and communication
LGU	Local governmental unit
LF	Lymphatic filariasis
MDA	mass drug administration
MOH	Ministry of Health
P/A/M	Province/Autonomous Region/Municipality (regarding China)
PacELF	Pacific Programme to Eliminate Lymphatic Filariasis
PIS	Pacific Island Survey (referring to a study performed by two WHO survey teams between 2001-2002 of 3,683 children attending 27 primary schools in 13 Pacific Island countries, as reported by Hughes et al. 2004)
STH	soil-transmitted helminths
STHCP	Soil-Transmitted Helminths Control Program
WHO	World Health Organization
UNICEF	United Nations Children's Fund

Forward

Neglected tropical diseases (NTD) affect large segments of the world population, mainly the poor and the hard to reach population groups where lack of access to health care and other services is already a problem. Although most of these diseases will not cause death, they will often result in debilitating complications, contributing to malnutrition and disabilities such as in the case of onchocerciasis (can cause blindness) and lymphatic filariasis (can cause elephantiasis).

NTD pathogens include viruses, bacteria, fungi, ecto-parasites and helminths. Most of these are diseases of poverty. Many will target primarily ethnic minorities, children and women in childbearing age. The World Health Organization is highly committed to addressing the NTDs. Prevention and control of NTDs can significantly contribute to the accomplishment of the Millennium Development Goals (MDG).

One of the key challenges is the lack of adequate data. NTDs are not subject to compulsory reporting. Available data seems to suggest that the highest disease burden is due to one group of NTD's, the soil-transmitted helminths (STH). It is estimated that more than 1.2 billion people might be infected with STHs and/or schistosomes in the Asia Pacific Region alone. STH infections cause morbidity by affecting nutritional status, growth and cognitive development in children. Some helminth infections are among the leading causes of anemia throughout the developing world.

Much less is known about the epidemiological profile of food born trematodes and cestodes. Indirect evidence provided by the veterinary public health sector suggests that the human public health dimension of these zoonotic infections may be underestimated.

A comprehensive review on the epidemiology of helminths in the Western Pacific Region (WPR) was conducted by the Western Pacific Regional Office of the World Health Organization. Data were collected through communications with WHO staff and country health officials, as well as through searches of online health databases and peer-reviewed publications. The profile for each country is divided into four categories of helminths: soil-transmitted helminths (Ascariasis, Trichuriasis and hookworm infections); food-borne trematodes (fascioliasis, chlonorchiasis, opisthorchiasis, and paragonimiasis); cestodes (taeniasis, cysticercosis, and echinococcosis); and schistosomes. Data from 1997 to 2008 were included in the review.

We expect this information to contribute to expanding our knowledge on the epidemiological profile of the aforementioned four worm categories. In doing so, it should raise the profile and level of attention needed to encourage effective public health interventions targeting a selected group of NTDs. Some countries and areas have already taken the lead in terms of collecting and sharing of information as well as engaging in control programs. Others will need to follow.

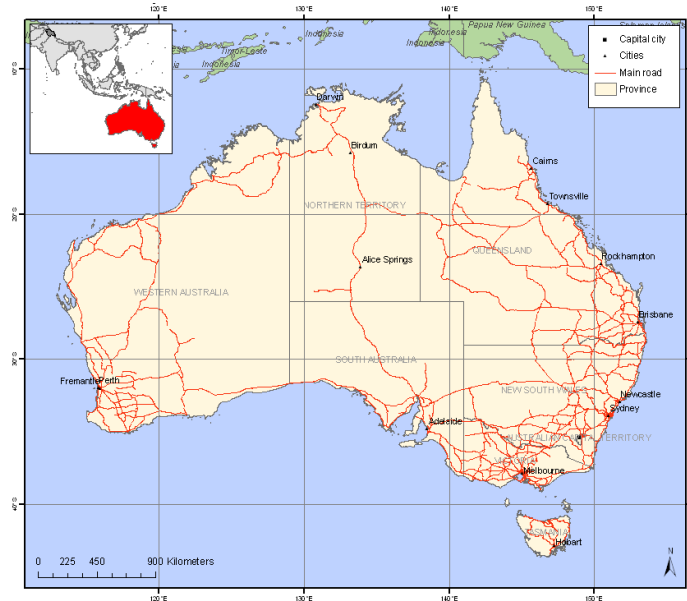
The current review is a "work in progress". Our expectation is that this will serve as the basis for a more extensive data bank on the four categories of helminths supporting the development of effective interventions as well as scaling up of existing ones. Efforts will be made to update the epidemiological profile of helminthiasis in the Western Pacific Region 1997-2008 as soon as more data become available.

Acknowledgement

The Western Pacific Regional Office of the World Health Organization wishes to acknowledge the valuable contributions of Ms Nicole Fox, a Fulbright scholar and an intern in the Malaria, Vectorborne and Other Parasitic Diseases unit of the Western Pacific Regional Office for compiling the information and preparing this review under the supervision of the Regional Advisor for Malaria, other Vectorborne and Parasitic Diseases.

Australia

As Australia is a developed country, helminth infection is primarily an affliction of marginalized populations and/or minority groups. Little information is available regarding the epidemiology of all types of helminths in Australia; however, what data are available indicate that further study of the prevalence and intensity of helminth infection in marginalized populations, especially aboriginal communities, is needed.



Source: World Health Organization. The boundaries and names shown and the designations used on this map do not imply the expression of an 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.

Table 1: Population by Age Group

Total Population	0-4 Years (000)	5-9 Years (000)	10-14 Years (000)	15-19 Years (000)	20-29 Years (000)	30-39 Years (000)	40-49 Years (000)	50-59 Years (000)	60+ Years (000)	Median Age
20,530,000	1,267	1,301	1,391	1,413	2,802	2,983	3,015	2,632	1,002	36.7

Source: World Population Prospects: The 2006 Revision Population Database

Status of Soil-Transmitted Helminths (Source: Official)

No data on soil-transmitted helminths were available from health officials from 1997-2008.

Status of Soil-Transmitted Helminths (Source: Published Data)

Information on the prevalence and distribution of STH in the country is limited. One study of 108 Aborigines in north Western Australia found the following gastrointestinal helminths (including cestodes): *H. nana* (54.6%), *A. duodenale hookworm* (30.6%), *E. vermicularis* (6.5%), *T. trichiura* (2.8%), and *S. stercoralis* (1.9% - Reynoldson et al. 1997). While this may indicate that Aboriginal groups have a high prevalence of intestinal parasites, more research and surveillance needs to be conducted regarding the epidemiology STH in minority groups in Australia.

Status of Food-Borne Trematodes (Source: Official)

No data on food-borne trematodes were available from health officials from 1997-2008.

Status of Food-Borne Trematodes (Source: Published Data)

Paragoniumus is not common in Australia and poses no significant health threat (Hughes et al 2002). No other published data on food-borne trematodes were available from 1997-2008.

Status of Cestodes (Source: Official)

No data on cestodes were available from health authorities from 1997-2008.

Status of Cestodes (Source: Published Data)

The distribution of *E. granulosus* in Australia is greatly correlated to rainfall, prevalent in regions with temperatures of less than 30° C (86° F) and at least 25mm of rainfall for six months per year (Jenkins 2004). The disease is perpetuated through definitive wildlife hosts and domestic intermediate hosts. The regions most affected are eastern Victoria, New South Wales, Queensland, and the south-western corner of Western Australia (Jenkins 2004). Though echinococcosis is a notifiable disease in all States and Territories except New South Wales (where the majority of cases occur), human echinococcosis cases are historically underreported (Jenkins 2004). Approximately 80 to 100 new cases are diagnosed each year, including child cases (Jenkins 2004). Though Aboriginal infection rates are relatively unknown, the most recent national prevalence index indicated that the prevalence of echinococcosis in Aboriginees was 12.2 times higher than other rural populations (Jenkins 2004*).

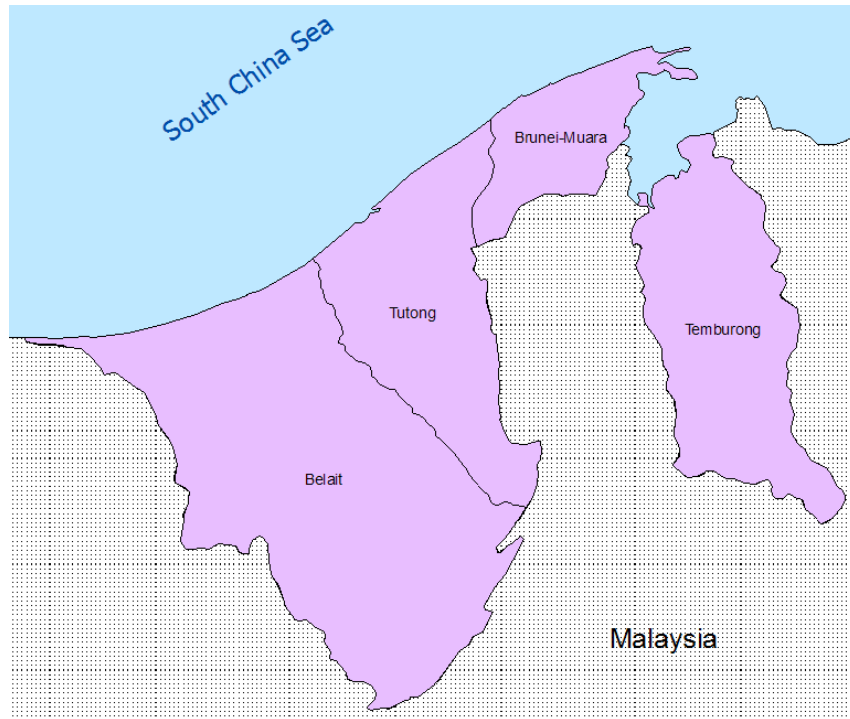
In 2002, Tasmania announced the “provisional eradication” of *E. granulosus* after 30 years of hydatid control efforts (Jenkins 2004). This control was achieved in part because wildlife was never involved in transmission, and Tasmania, as an island, has control over animal movements (Jenkins 2004).

* data from 1996

Status of Schistosomes

Schistosomiasis is not endemic in Australia, and several studies have proved that Australian snails are unable to act as vectors of the disease (Hughes et al. 2002).

Brunei Darussalam



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382,000	40	37	35	33	75	67	47	29	6	26.2

Source: World Population Prospects: The 2006 Revision Population Database

Country Situation

According to the Ministry of Health, helminth infection is not common in Brunei Darussalam and is not causing major health problems. As a result, there are currently no interventions in place to prevent helminth infection, nor any research being conducted on helminth prevalence.

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index?reportId=5_29437

