

PALAU

1. CONTEXT

1.1 Demographics

The estimated multi-ethnic population of Palau was 20 550 in 2009, with an estimated annual population growth rate of 0.99%. The population consists of 69.9% Palauans (who are a conglomeration of Micronesians with Malayan and Melanesian admixtures), 15.3% Filipinos, 4.9% Chinese, 2.4% other Asian, 1.9% Causacian, 1.4% Carolinian and 4.2% other or unspecified groups (2000 estimate). The 2006 estimate indicated a population density of 46 persons per square kilometre. In 2007, approximately 77% of the Palauan population were living in Koror City.

Since the 1990 census, life expectancy at birth has been higher for women than men; the 2005 estimate stood at 69 years, 72.1 years for women and 66.3 years for men.

1.2 Political situation

Palau is a democratic republic with directly elected executive and legislative branches. Presidential elections to select the President and the Vice-President take place every four years. Elections were last held in 2008. His Excellency Johnson Toribiong is the current Head of State and President of the Republic of Palau. The Vice-President is Kerai Mariur.

The Palau National Congress (*Olbiil era Kelulau*) has two houses: the Senate and the House of Delegates. The Senate has 13 members, while the House of Delegates has 16 members, one from each of Palau's states. All legislators serve four-year terms for a maximum of three cycles, or 12 years. Each state also elects its own governor and legislature.

The Council of Chiefs is an advisory body to the President that contains the highest traditional chiefs from each of the 16 states. The Council is consulted on matters concerning traditional laws and customs.

The judicial system consists of the Supreme Court, the National Court, the Court of Common Pleas, and the Land Court. The Supreme Court has trial and appellate divisions and is presided over by the Chief Justice.

1.3 Socioeconomic situation

Palau's real per capita gross domestic product (GDP) of US\$ 8423 (2007 estimate) makes it one of the wealthier Pacific island states. The economy relies primarily on tourism, subsistence agriculture and fishing. The Government is the major employer, relying heavily on financial assistance from the United States of America. Business and tourist arrivals numbered 89 151 in 2007. Long-term prospects for the key tourist sector have been greatly bolstered by the expansion of air travel in the Pacific, the rising prosperity of leading East Asian countries, and the willingness of foreigners to finance infrastructure development.

1.4 Risks, vulnerabilities and hazards

The population of Palau is at risk for a high number of hazards, including a uniquely high hydrometeorological and geological risk. Due to its geographical location as the United States of America's westernmost border with Asia, Palau is also more vulnerable to hazards emerging in Asia, such as infectious diseases.

Vulnerability analysis shows that Palau is 19.25 times more vulnerable to hazards than the United States of America, and it should not be understated that the most significant risk factor in vulnerability to disasters is poverty. The population of Palau is made of 69.9% Palauans, as well as a large number of young, impoverished, foreign worker households mixed with smaller local lower- and middle-class factions. Economic stability is dependent upon United States federal support, immigration, tourism, and the United States and Asian stock, commodity and import/export markets, as well as fuel/energy prices. It is unfortunate that this most difficult of vulnerabilities to alter is also the most significant.

Over the past five years, public health preparedness in Palau has improved significantly, and a comprehensive all-hazard public health emergency operational plan has been developed, although it still needs to be tested and validated by field exercises and is lacking standard operating procedures. The Department of Public Health has developed an extensive level of awareness regarding disaster preparedness and response, yet much still has to be done in terms of educating clinicians and the public. All components of preparedness—planning, training, hazard monitoring, warning, population protection—are much more cost-effective than emergency response after an event.¹

Palau's isolation from the United States mainland increases logistical demands. Supply chains, communication networks and air runways are limited options. Improving long-distance communication and logistical coordination that may lessen the “tyranny of distance” for any emergency response measures would help to reduce Palau's vulnerability to public health disasters.

2. HEALTH SITUATION AND TREND

2.1 Communicable and noncommunicable diseases, health risk factors and transition

The population of Palau faces a heavy burden of both infectious and chronic diseases. Like many developing nations, the country has recently undergone an epidemiological shift from diseases of the developing world, such as malnutrition and communicable diseases, to an increasing burden of diseases of the developed world, like diabetes, heart disease, obesity and kidney failure. This is placing an inordinate burden on the already low human, material and fiscal resources. However, the general health of Palauans seems to have improved a little, as manifested in health indicators such as a decreased crude death rate, increased life expectancy at birth, and a low maternal mortality ratio.

It is expected that environmental problems will increase with more foreign investment and workers on the islands in coming years. Water pollution is a major concern due to the lack of sufficient land area for proper waste disposal, and progressive industrial development will continue to worsen both air and marine quality. Marine life and reefs will also be affected by pollution. Other negative health impacts of globalization, such as reduced physical activity and consumption of processed rather than locally produced foods, are already encroaching insidiously beyond Koror and Airai, where over 79% of the population resides.

2.2 Outbreaks of communicable diseases

Palau has one of the best communicable disease surveillance systems of all the Pacific island countries and regularly reports outbreaks of infectious disease on PacNet. In 2009, the Ministry of Health was able to detect and control the outbreak of pandemic influenza A (H1N1) the country experienced. Collaborative initiatives among principal health officials, health specialists and multisectoral community leaders have been a positive step forward in monitoring events and communicable disease outbreaks.

2.3 Leading causes of mortality and morbidity

While tuberculosis remains a problem and the prevalence of leprosy has increased slightly, modern lifestyle-related diseases are at the top of the list of major causes of death. Based on information furnished by the Ministry of Health, the reported leading causes of mortality in 2009 were cardio/cerebrovascular disease; cancer; lung disease; septicaemia; injuries; kidney disease; liver disease and complications of childbirth/pregnancy. In 2007, the leading causes of hospitalization were diseases of the respiratory system; diseases of the genitourinary system; diseases of the digestive system; normal childbirth and delivery; diseases of the endocrine and metabolic system; diseases of the circulatory system; infectious and parasitic diseases; injuries and poisonings; diseases of the nervous system; and complications of pregnancy, childbirth and the puerperium.

2.4 Maternal, child and infant diseases

Great progress is being made in improving maternal health in Palau, and only one maternal death was reported in 2009.

¹ Rykken D, Keim M. Republic of Palau, Public Health Hazard Vulnerability Assessment, June 2006.

The under-five mortality rate fell from 34 per 1000 live births in 1990 to 12.2 in 2010, a fairly low level among Pacific island countries. However, the percentage decline in the 1990s was lower than during the pre-1990s, indicating that further reduction in under-five mortality is becoming progressively more difficult as the mortality rate declines.

Infant mortality decreased from 25 to 22 per 1000 live births in the 1990s, then further to 7.2 per 1000 live births in 2007. In 2010, the rate increased back up to 12.2 per 1000 live births.

In 2009, the estimated coverage for DTP3 was 49% and 75% for measles first dose (MCV1).

2.5 Burden of disease

To paraphrase the 11th Annual Report on the Republic of Palau's Implementation of the Compact of Free Association fiscal year 2006, the best description for health in Palau is "in transition". The transition of culture, political system, economic development and technology has moved the health emphasis from communicable to noncommunicable diseases. Most of the reported leading causes of death are due to noncommunicable diseases related to lifestyle-associated risk factors, and are therefore preventable. Such a transitional status has led to pending issues that need to be evaluated, such as the cost of off-island medical referrals, the cost of haemodialysis and intensive care services, and the financial sustainability of a secondary health care facility in such a small island community.

3. HEALTH SYSTEM

3.1 Ministry of Health's mission, vision and objectives

"Health for all" remains a top priority in the socioeconomic development of Palau. The Government aims to provide sufficient trained and qualified staff to provide quality services in all outlying dispensaries, including the more remote areas and islands, as well as at the main hospital in Koror.

The national health priorities are:

- to deliver quality health care, including community-based health care, in order to improve the health of the population and contribute towards building a balanced economy;
- to control communicable and noncommunicable diseases;
- to improve the nutritional status of community members through implementation of a national action plan for food and nutrition;
- to protect environmental health;
- to increase the accessibility of health services through establishment of outlying dispensaries/health centres;
- to train and certify health workers and allied health workers in proper training institutions;
- to establish a national insurance policy; and
- to improve and enhance the health information system.

3.2 Organization of health services and delivery systems

A high percentage of health services are supported by grant funds and technical assistance from the Federal Government of the United States of America, in addition to the provision of technical support and limited funding from a number of United Nations agencies. However, future resource requirements to sustain the operations of the health system will still be dependent on the country's successful economic development.

The Belau National Hospital (BNH), built with United States funding, is the main health facility in the country. BNH has undergone recent upgrades that will significantly mitigate its vulnerability to both natural and technological disasters, including: installation of two generators to allow for one month of independent power generation; enhancement of respiratory isolation and PPE capabilities; equipping and training of hazardous materials teams; updating of the hospital's disaster plan; and upgrading of staff communications. Challenges remain, however, in that, by nature, BNH represents a centralized dependency for inpatient and outpatient care that increases the vulnerability of the health system. It is not economically feasible to decentralize inpatient care,

but steps to build inpatient capacity and capabilities on the other islands may add some limited additional secondary capability.

Four community health centres, known as superdispensaries, are located strategically throughout the country, three on the big island of Babeldaob and one on the southern island of Peleliu for the Southern Lagoon population. In addition, four additional satellite dispensaries serve hard-to-reach outlying localities, Kayangel in the north, and Angaur and the South-West Islands in the south.

3.3 Health policy, planning and regulatory framework

In June 2005, the Ministry of Health adopted a vision and a mission statement, framed by Article VI of the Constitution of the Republic of Palau, that embraced a holistic definition of health that stated that the health of Palauans is influenced by health services, the environment, behaviour and heredity. These issues were discussed at the 1st Public Health Convention, held in December 2005.

During a leadership symposium, held in February 2006, certain priorities were identified, including addressing the burden of noncommunicable diseases; solid and liquid waste management; human resources for health; and improvement of the legal framework for health in Palau. Operationalization of the health system is based on a conscious decision to make health a domain owned by the community. This clarifies certain strategies that will help move Palau towards a more sustainable health care system. Strategic health planning, improved fiscal control, enhanced primary health care through community health centres, strengthening of community advocacy through the creation of a community advocacy programme, and improvements to the health information system, have all given the health sector the ability to plan better for the future. These activities are also enhanced by the decision to address human resource, procurement and grant issues. All these initiatives in the Ministry of Health and at the national level to increase accountability and promote sound and sustainable development provided the impetus for implementation of the Integrated Planning Process 2006-2008 for the entire executive branch of government. The process was aimed at streamlining health system development and ensuring greater health worker productivity and an improvement in health status for all people living in Palau.

3.4 Health care financing

The total expenditure on health was 10.8% of GDP in 2008, with 78.4% coming from the Government. External resources for health accounted for 32% of total health expenditure. Total per capita expenditure on health was US\$ 957.

3.5 Human resources for health

Since enactment of the mandatory retirement law, there has been a rapid reduction in the number of health workers, due to retirement of ageing staff. This has resulted in a critical shortage of health workers, particularly among the nursing force and allied health personnel. In addition, more staff members are needed as a result of the expanded main health facility and completion of the superdispensaries, and training of more local health workers is needed to allow them to replace expensive expatriate staff.

Vigorous efforts are under way between the Ministry of Health and the Ministry of Education to ensure that an increased number of high-school graduates can stream into health careers. These include a United States federal grant from the Department of Education to the Ministry of Education to develop a Health Academy in the only public high school, Palau High School. The Ministry of Health is a key partner in the initiative. Marketing efforts to increase the number of high-school students choosing nursing, medicine and allied health professions as careers are under way through development of two marketing videos – “Careers in nursing” and “Careers in health for Palau, the region and the world”.

A nursing programme was established in the Palau Community College in 1998 and continues to produce a minimum of two graduates a year, but numbers are insufficient to meet staffing requirements. Bridging programmes in nursing and other allied health fields are currently in place in the Palau Community College and within the Ministry of Health.

Since 2001, the Ministry of Health has been partnered with Palau Community College (PCC) to participate in the College’s Palau Area Health Education Center (AHEC), which is funded through the United States Department of Health and Human Services/Health Resources and Services Administration. The Palau AHEC is part of the

Hawaii-Pacific Basin AHEC, which is managed by the John A. Burns School of Medicine (JABSOM)/University of Hawaii. Since 2001, JABSOM has funnelled over US\$ 2 million to promote health worker training in Palau and Micronesia. The Palau AHEC has sponsored most of the 98 courses conducted by the Fiji School of Medicine School of Public Health (now Department of Public Health) and all courses conducted by the University of Auckland, Faculty of Medicine (8) in the region. A total of 56 physicians, nurses, environmental health workers, health administrators, and nutrition workers from Palau have graduated with Fiji School of Medicine (FSMed) undergraduate and postgraduate certificates and diplomas. In addition, four physicians from Palau have been awarded Postgraduate Diplomas in General Practice from the University of Auckland, Faculty of Medicine. Most of these activities have been achieved through the efforts of the Ministry of Health–PCC AHEC partnership.

3.6 Partnerships

Partnerships developed by the Ministry of Health fall under three categories: bilateral, regional and institutional. The Ministry has developed bilateral relationships with the governments of the Czech Republic, India, Israel, Japan (JICA), the Philippines, the Republic of Korea, Spain, and the United States of America, among others. Regional partnerships include those with the Pacific Islands Health Officers Association (PIHOA), the Secretariat of the Pacific Community (SPC), the Pacific Forum, the Pacific Emergency Health Initiative (PEHI), the Health Research Council of the Pacific (HRCF) (formerly the Pacific Health Research Council), and the Pacific Open Learning Health Net (POLHN).

Partner institutions in various countries in the region have been developed for the purpose of training and medical referrals for patients requiring tertiary care and services not provided by Belau National Hospital. Partner institutions for education and training include the Fiji School of Medicine (FSMed), and the Good Samaritan Hospital in Los Angeles, United States of America, among others.

Other partner institutions provide specialized services in adult and paediatric cardiology, EENT and ophthalmology, either on an annual basis or every two years. Recent developments will add to the current list of services provided by visiting specialists on an ad hoc basis. Ministry of Health physicians and other health professionals provide training for student interns in partner institutions, such as the University of Washington in Seattle, United States of America, and the University of Hawaii, among others.

3.7 Challenges to health system strengthening

- The numbers and distribution of the health workforce (in medicine, nursing, allied health fields) are inadequate and pose a continuing challenge. In addition, the majority of those already working are underprepared.
- A health resource development services department is needed within the Ministry of Health to provide the necessary support services to Ministry personnel.
- Quality assurance performance measures are needed, not only for service providers, but for all personnel.
- Infrastructure development in the country, particularly in the health sector, is still limited, which hinders the maximum utilization of limited resources for service provision in all aspects of health care, from primary to secondary and tertiary, including off-island medical referrals.
- Health care financing is inadequate and will continue to be, necessitating ongoing lobbying with local legislature and vigorous solicitation efforts for assistance from regional and international organizations and institutions, as well as bilateral negotiations for sources of support via various forms of technical assistance.
- The health information system (HIS) infrastructure is already established, the hardware is already in place and qualified personnel are on board, but not in sufficient numbers or in the necessary specialized areas. There is a great need to increase the capacity of the HIS for monthly compilation, analysis and reporting of data from its various data sources. Integration of data and better management still need to take place. Much progress has taken place, but further support and development is needed to respond to all the competing reporting requirements and needs of the Ministry of Health.

4. LISTING OF MAJOR INFORMATION SOURCES AND DATABASES

<i>Title 1</i>	:	<i>Palau Government statistics</i>
<i>Operator</i>	:	Palau Government
<i>Web address</i>	:	http://www.palau.gov.net
<i>Title 2</i>	:	<i>World fact book, 2007</i>
<i>Web address</i>	:	https://www.cia.gov/library/publications/the-world-factbook/print/ps.html
<i>Title 3</i>	:	<i>Palau statistics and key health indicators</i>
<i>Operator</i>	:	Secretariat of the Pacific Community
<i>Web address</i>	:	http://www.spc.int/prism
<i>Title 4</i>	:	<i>Health indicators</i>
<i>Operator</i>	:	Ministry of Health
<i>Title 5</i>	:	<i>National expenditure on health</i>
<i>Operator</i>	:	World Health Organization
<i>Web address</i>	:	http://www.who.int/nha/country/plw/en/
<i>Title 6</i>	:	Pacific Island Populations – Estimates and projections of demographic indicators for selected years
<i>Operator</i>	:	Secretariat of the Pacific Community
<i>Web address</i>	:	http://www.spc.int

5. ADDRESSES

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