

GUAM

1. DEMOGRAPHICS, GENDER AND POVERTY

The population of Guam was estimated to be 168 564 in 2005, and it is estimated that there are 104 males for every 100 females. Population density is 311 per square kilometre. Total life expectancy for both sexes is 78.40 years. Men are expected to live up to 75.34 years and women up to 81.64 years.

Population	[Total]	168 564	Life expectancy at birth (years)	[Both]	78.40
	[0-14 years]	49 532 (29.38%)		[Male]	75.34
	[65+ years]	10 982 (6.52%)		[Female]	81.64
Crude birth rate (per 1000 population)		19.03	Total fertility rate		2.60
Crude death rate (per 1000 population)		4.41	% of population served with safe water	[Total]	100.00 (2003p)
				[Urban]	...
				[Rural]	...
Infant mortality rate (per 1000 live births)		11.22 (2003p)	% of population with adequate sanitary facilities	[Total]	100.00 (2003p)
				[Urban]	...
				[Rural]	...
Maternal mortality ratio (per 100 000 live births)		0.00 (2003p)			

p - Provisional

2. POLITICAL AND SOCIOECONOMIC SITUATION

2.1 Political situation

The political situation on Guam remains stable, with elections for the mayors of municipal civil districts (villages) and the unicameral legislature held in 2004. Cooperation between the Executive Branch and the Legislative Branch is growing.

2.2 Economic situation

Guam has been in a financial crisis since the 1994 fiscal year. The economic decline is related to the Asian economic crisis and unforeseen events such as supertyphoons (which have destroyed much of Guam's infrastructure and left much of the island with little or no potable water for weeks and no electricity for two to three months in some areas), the war in Iraq, and the outbreak of severe acute respiratory syndrome (SARS). Guam's economy is heavily reliant on the tourism industry, with the majority of visitors originating from Japan and the Pacific rim. Tourist arrivals and expenditures have dwindled due to the aforementioned events, although there are indications of an upswing.

The most critical impact of the crisis has been in the employment area. According to the local Department of Labour office, Guam's unemployment rate was 7.7 % as of March 2004. In 2002, the reported per capita gross island product was US\$ 15 439.

3. HEALTH SITUATION

3.1 Health trends

The crude death rate in 2005 was 4.41 per 1000 population, a slight decrease from 4.35 in 2004. However, the provisional infant mortality rate in 2003 was 11.22 per 1000 live births, a significant increase from the 2002 rate of 6.21 per 1000 live births. Although the health status of Guam's population continues to improve, the five leading causes of death in 2002 remain as follows: diseases of the heart (130.39 per 1000 population), malignant neoplasms (76.99), cerebrovascular diseases (32.29), accidents (14.28) and suicides (13.66).

3.2 Health systems

Guam is faced with the challenge of maintaining a health care system that will adequately meet the needs of a predominantly young and growing population. At the same time, it is also faced with the added challenge of addressing the problems of the rapidly increasing number of older people, forecast to increase from 3.9% of the total population in 1990 to 7.5% in 2010.

A reduction in human and financial resources has severely impacted the health system. An early retirement programme, instituted at the end of 1999, led many experienced health workers to retire. While the vacated positions have continued to be funded, there is not a large enough resource pool to fill all of them. Tightening government budgets have left some less critical positions vacant, and these vacancies have reduced the overall amount of services available to the uninsured and underinsured population. The vacancies have also affected progress in strengthening other health service priority areas, such as disposal of hazardous and toxic materials, environmental protection, vector control, and drug and alcohol abuse services.

4. NATIONAL HEALTH PLAN AND PRIORITIES

Guam is dedicated to the attainment of health for all by the year 2010. In 1992, the Guam Health Planning and Development Agency identified 13 health service priority areas to be strengthened:

- human resource development;
- health planning;
- wellness promotion;
- health information systems;
- communicable disease control;
- disposal of hazardous and toxic materials;
- availability and accessibility of health services;
- environmental protection;
- drug and alcohol abuse;
- chronic disease prevention and control;
- injury prevention;
- maternal and child health; and
- vector control.

Although some improvement has been made in the area of health information systems, wellness promotion and communicable disease control, the remaining areas continue to be top priorities.

All public health services depend on having a basic infrastructure, especially in terms of personnel. Unfortunately, Guam is experiencing health workforce shortages due to the early retirement of its most experienced professionals. Human resources for health in critical areas are still lacking and must be developed locally to the greatest extent possible. The following training needs are priorities: environmental studies, with an emphasis in environmental law, policy,

management, and planning and analysis; and short-term training in retail hazard analysis critical control point (HACCP), and in drugs, medical devices and controlled substances.

The Guam Environmental Protection Agency (GEPA) relies heavily on its professional staff to provide technical expertise in all areas of environmental resource protection, management and policy. In addition, technical expertise in the areas of environmental protection, management and policy is needed for the young professionals within GEPA, as the fields of environmental protection and science are constantly changing. However, due to early retirement and voluntary separation, all personnel with over 10 years of professional and technical experience have left GEPA, leaving half (two out of four) of the remaining personnel with less than four years of professional GEPA experience. Combined with the local hiring freeze, it is anticipated that no new professionals will be hired within the next two to three years. The lack of well educated and technically trained personnel is severely undermining the professional credibility of GEPA. To further complicate matters, GEPA also serves as the primary regulatory agency for all environmental issues and policies on Guam, and takes the lead for most other islands in Micronesia.

The Division of Environmental Health of the Department of Public Health and Social Services (DPHSS) is also greatly understaffed. Over half the Division's staff have fewer than five years experience, and staff generally lack specialized training.

Training in retail HACCP is lacking. The United States Federal Drug Administration is urging all locales, states and territories to explore HACCP as a requirement in retail and food service establishments, and to develop a model food code that incorporates HACCP principles.

All health care products, from toothbrushes to prescription medications, are regulated and enforced by the Drug and Medical Device Programme. Because of Guam's geographical location and the ethnic diversity of its people, various drugs and medical devices of foreign origin are imported, distributed and marketed. These include many poorly labelled, misbranded and adulterated drugs, as well as hazardous medical devices. Training in the area of drug and medical devices is therefore necessary for Division of Environmental Health staff.

Forged prescriptions, lack of accountability of controlled substances by businesses, and illegal dispensing of controlled substances are estimated to be significant problems. However, because of the lack of human resources, only urgent cases are pursued and investigated.

5. MAJOR INFORMATION SOURCES

Office of Vital Statistics, Guam Department of Health and Social Services

Department of Health and Social Services, Guam

United States of America Bureau of the Census

Secretariat of the Pacific Community <http://www.spc.int/prism/>

6. ADDRESSES

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

Office Address :
Postal Address : P.O. Box 2816, Agana, Guam 96910
Official Email Address :
Telephone : (671) 735-7102
Fax : (671) 734-5910
Office Hours :
Website :

WHO REPRESENTATIVE

There is no WHO Representative in Guam. Queries about WHO's programme of collaboration with Guam should be directed to the Director (Programme Management):

Office Address : World Health Organization
Regional Office for the Western Pacific,
United Nations Avenue, Manila, Philippines 1000

Postal Address : P.O. Box 2932, Manila, Philippines 1000

Official Email Address :

Telephone : (632) 528-8001 (trunk line)

Fax :

Office Hours : 0700H-1530H

Website : <http://www.wpro.who.int>

	INDICATORS	DATA			Year	Source
		Total	Male	Female		
1	Area (1 000 km ²)	0.54				1
2	Estimated population ('000s)	168.56	85.92	82.65	2005	2
3	Annual population growth rate (%)	1.46	...	...	2005	2
4	Percentage of population					
	- 0–14 years	29.38 ^a	29.85 ^a	28.90 ^a	2005	2
	- 65+ years	6.52 ^a	6.00 ^a	7.05 ^a	2005	2
5	Urban population (%)	94.00	...	...	2005 est	3
6	Crude birth rate (per 1 000 population)	19.03	...	...	2005	2
7	Crude death rate (per 1 000 population)	4.41	...	...	2005	2
8	Rate of natural increase of population (% per annum)	1.46	...	...	2005	2
9	Life expectancy (years)					
	- at birth	78.40	75.34	81.64	2005	2
	- Health-adjusted Life Expectancy (HALE) at age 60	...	...	...
10	Adult literacy rate (%)	...	...	...
11	Neonatal mortality rate (per 1 000 live births)	3.41	...	...	2002	4
12	Infant mortality rate (per 1 000 live births)	11.22	...	...	2003 p	4
13	Under-five mortality rate (per 1 000 live births)	10.00	...	...	2005 est	3
14	Total fertility rate (women aged 15–49 years)			2.60	2005	2
15	Maternal mortality ratio (per 100 000 live births)			0.00	2003 p	5
16	Percentage of newborn infants weighing at least 2500 g at birth	91.54 ^e	...	...	2004	4
17	Prevalence of underweight children under five years of age	...	...	...
18	Percentage of pregnant women with anaemia			1.20	2001	6
19	Immunization coverage for infants (%)					
	- BCG	NR	NR	NR.	2004	7
	- DTP3	87.00	...	...	2004	7
	- OPV3	79.00	...	...	2004	7
	- Measles	82.00	...	...	2004	7
	- Hepatitis B III	85.00	...	...	2004	7
20	MCH coverage (pregnancies, deliveries, infant care)					
	- Percentage of pregnant women cared for by skilled health personnel			92.05	2001	6
	- Percentage of pregnant women immunized with tetanus toxoid (TT2)			...		
	- Percentage of deliveries at home by skilled health personnel (as % of total deliveries)			...		
	- Percentage of deliveries in health facilities (as % of total deliveries)			...		
21	Percentage of women in the reproductive age group using modern contraceptive methods			...		
22	Condom use rate of the contraceptive prevalence rate	...	...	...
23	HIV prevalence among 15–24 year-old pregnant women			...		
24	Number of children orphaned by HIV/AIDS ^{ab}	...	...	...

COUNTRY HEALTH INFORMATION PROFILE

INDICATORS		DATA			Year	Source		
		Total	Urban	Rural				
25	Proportion of population with sustainable access to an improved water source	100.00	...	...	2003p	5
26	Proportion of population with access to improved sanitation	100.00	...	...	2003p	5
27	Proportion of the population using solid fuels for cooking or heating (%)	<5.00	...	...	2003	7
28	Proportion of households with access to secure tenure	...	...	...	
29	Proportion of vehicles using unleaded gasoline (%)	...	...	...	
30	Health care waste generation (metric tons per year)	...	...	...	
31	Human development index	...	...	...	
32	Per capita GDP at current market prices (US\$)	15 439.00 ^b	...	...	2002	8
33	Rate of growth of per capita GDP (%)	...	...	...	
34	Health expenditure							
	Total health expenditure							
	- amount (in million US\$)			159.81	2000	6		
	- total health expenditure on health as % of GDP			...				
	- per capita total expenditure on health (in US\$)			1032.36	2000	6		
	Government expenditure on health							
	- amount (in million US\$)			34.35	FY2000	4		
	- general government expenditure on health as % of total expenditure on health			...				
	- general government expenditure on health as % of total general government expenditure			6.18	FY2000	4		
	External source of government health expenditure							
	- external resources for health as % of general government expenditure on health			...				
	Private health expenditure							
	- private expenditure on health as % of total expenditure on health			...				
	Exchange rate in US\$ of local currency is: 1 US\$ =			NR				
35	Health insurance coverage as % of total population			...				
INDICATORS		DATA					Year	Source
		Total	Male	Female	Total	Male			Female
		Number			Rate per 10 000 population			
36	Health workforce							
	- physicians	166	11.10	1999 6
	- dentists	31 ^f	2.05	1999 6
	- pharmacists	
	- nurses	
	- midwives	
	- other nursing / auxiliary staff	
	- other paramedical staff (e.g. medical assistants, laboratory technicians, X-ray technicians)	
	- other health personnel (health inspectors, assistant sanitarians, traditional workers, etc.)	
37	Yearly new graduates – physicians				
38	Yearly new graduates – nurses				

INDICATORS		DATA						Year	Source
		Total	Male	Female	Total	Male	Female		
39	Ten leading causes of morbidity	Number			Rate per 100 000 population				
	1.	...	...	...	...	...	...
	2.	...	...	...	...	...	...
	3.	...	...	...	...	...	...
	4.	...	...	...	...	...	...
	5.	...	...	...	...	...	...
	6.	...	...	...	...	...	...
	7.	...	...	...	...	...	...
	8.	...	...	...	...	...	...
	9.	...	...	...	...	...	...
	10.	...	...	...	...	...	...
40	Ten leading causes of mortality	Number			Rate per 100 000 population				
	1. Diseases of the heart	210	...	...	130.39	...	...	2002	4
	2. Malignant neoplasm	124	...	...	76.99	...	...	2002	4
	3. Cerebrovascular disease	52	...	...	32.29	...	...	2002	4
	4. All other accidents	23	...	...	14.28	...	...	2002	4
	5. Suicide	22	...	...	13.66	...	...	2002	4
	6. Pneumonia	22	...	...	13.66	...	...	2002	4
	7. Chronic obstructive pulmonary diseases	20	...	...	12.42	...	...	2002	4
	8. Bacterial diseases (septicaemia)	18	...	...	11.18	...	...	2002	4
	9. Diabetes mellitus	18	...	...	11.18	...	...	2002	4
	10. Motor vehicle accidents	13	...	...	8.07	...	...	2002	4
41	Selected diseases under the WHO-EPI	Number of cases			Number of deaths				
	- Diphtheria	0	0	0	0	0	0	2004	7
	- Pertussis (whooping cough)	0	0	0	0	0	0	2004	7
	- Tetanus	0	0	0	0	0	0	2004	7
	- Neonatal tetanus	0	0	0	0	0	0	2004	7
	- Poliomyelitis	0	0	0	0	0	0	2004	7
	- Hib meningitis	0	0	0	0	0	0	2004	7
	- Measles	2	...	...	...	...	...	2004	7
	- Mumps	1	...	...	...	...	...	2004	7
	- Rubella	1	...	...	...	...	...	2004	7
- Congenital rubella syndrome	0	0	0	0	0	0	2004	7	
42	Selected communicable diseases	Number of cases ^{aa}			Number of deaths				
	Hepatitis viral	17	...	...	2	...	...	2003	7
	- Type A	2	...	...	0	0	0	2003	7
	- Type B	10	...	...	1	...	...	2003	7
	- Type C	5	...	...	1	...	...	2003	7
	- Type E	...	...	...	...	...	...
	- Unspecified	...	...	...	...	...	...
	Cholera	0	0	0	0	0	0	2003	7
	Typhoid fever	0	0	0	0	0	0	2003	7
	Encephalitis	2	...	...	0	0	0	2003	7
	Plague	0	0	0	0	0	0	2003	7
	Syphilis	...	...	...	...	...	...
	Gonorrhoea	...	...	...	...	...	...

COUNTRY HEALTH INFORMATION PROFILE

INDICATORS		DATA						Year	Source
		Total	Male	Female	Total	Male	Female		
42	Selected communicable diseases	Number of cases ^{aa}			Number of deaths				
	Leprosy	1	...	...	...	...	...	2001	7
	Malaria	...	...	...	...	...	...
	Dengue/DHF	...	...	...	...	...	...
43	Malaria	Prevalence rates			Death rates				
	- Rates associated with malaria (per 100 000 population)	...	...	...	...	...	...
	- Proportion of population in malaria-risk areas using effective malaria prevention measures ^c						...		
	- Proportion of population in malaria-risk areas using effective malaria treatment measures ^d						...		
44	Tuberculosis	Number of cases			Number of deaths				
	- All types	51	...	...	...	...	...	2004	7
	- New pulmonary tuberculosis (smear-positive)	22	...	...	...	...	...	2004	7
		Prevalence rates			Death rates				
	- Rates associated with tuberculosis (per 100 000 population)	91.00	...	...	10.00	...	...	2004	7
		Detection rates			Success rates				
- Proportion of tuberculosis cases detected and cured under directly observed treatment, short-course (DOTS)	50.00	...	...	96.00 (2003)	...	...	2004	7	
		Number of cases			Number of deaths				
45	Acute respiratory infections	137	...	...	11	7	4	2000	6
46	Diarrhoeal diseases	...	...	...	0	0	0	2000	6
47	Cancers								
	All cancers (malignant neoplasms only)	...	...	...	125	74	51	2000	6
	- Trachea, bronchus, and lung	...	...	...	36	22	14	2000	6
	- Stomach	...	...	...	7	3	4	2000	6
	- Colon and rectum	...	...	...	13	8	5	2000	6
	- Lip, oral cavity and pharynx	...	...	...	1	1	0	2000	6
	- Liver	...	...	...	7	6	1	2000	6
	- Cervix			...			2	2000	6
- Leukaemia	...	...	...	4	1	3	2000	6	
48	Circulatory								
	All circulatory system diseases	...	...	...	246	149	97	2000	6
	- Ischaemic heart disease	...	...	...	142	88	54	2000	6
	- Acute myocardial infarction	...	...	...	25	19	6	2000	6
	- Rheumatic fever and rheumatic heart diseases	...	...	...	2	2	0	2000	6
	- Cerebrovascular diseases	...	...	...	58	33	25	2000	6
- Hypertension	...	...	...	15	10	5	2000	6	
49	Maternal causes								
	- Haemorrhage			57			0	2000	6
	- Abortion			76			0	2000	6
	- Eclampsia			...			...
	- Sepsis			...			...
- Obstructed labour			...			...

INDICATORS		DATA						Year	Source
		Total	Male	Female	Total	Male	Female		
		Number of cases			Number of deaths				
50	Diabetes mellitus	...	...	...	21	8	13	2000	6
51	Mental disorders	...	...	...	0	0	0	2000	6
52	Injuries								
	- All types	...	...	...	82	69	13	2000	6
	- Motor and other vehicle accidents	...	...	...	23	18	5	2000	6
	- Suicide	...	...	...	29	27	2	2000	6
	- Homicide and violence	...	...	...	4	2	2	2000	6
	- Occupational injuries	...	...	...	5	4	1	2000	6
53	Proportion of population with access to affordable essential drugs on a sustainable basis						...		
54	Health infrastructure	Number			Number of beds				
	Public health facilities								
	- General hospitals			1			225	2000	6
	- Specialized hospitals			0			0	2000	6
	- District/first-level referral hospitals			0			0	2000	6
	- Primary health care centres			2			0	2000	6
	Private hospitals			0			0	2000	6
Notes:	<p>Red text Millennium Development Goals (MDG) indicators</p> <p>... Data not available</p> <p>est Estimate</p> <p>p Provisional</p> <p>NR Not relevant</p> <p>FY The financial year refers to the span from April 1 of respective year to March 31 next year.</p> <p>aa Figures refer to number of new reported cases.</p> <p>ab Proxy indicator for MDG indicator 20: Ratio of school attendance of orphans to school attendance of non-orphans age 10-14 years.</p> <p>a Computed by Health Information and Evidence for Policy Unit of the WHO Regional Office for the Western Pacific.</p> <p>b Figure reported as Gross Island Product.</p> <p>c Prevention is measured by the percentage of children ages 0–59 months sleeping under insecticide-treated bednets.</p> <p>d Treatment is measured by the proportion of children ages 0–59 months who were ill with the fever in the two weeks before the survey and who received appropriate antimalarial drugs.</p> <p>e Figure refers to birth weight equal to 2501 grams and above.</p> <p>f Figure refers to dental surgeons only.</p>								
Sources:	<p>1 Pacific Island Populations 2004. Secretariat of the Pacific Community.</p> <p>2 US Census Bureau (http://www.census.gov)</p> <p>3 Demographic Tables for the Western Pacific 2005-2010. World Health Organization, Regional Office for the Western Pacific.</p> <p>4 Guam Bureau of Statistics and Plans (http://www.spc.int/prism)</p> <p>5 Information furnished by the Department of Health and Social Services, Guam, 21 June 2004.</p> <p>6 Information furnished by the Department of Health and Social Services, Guam, 16 January 2003.</p> <p>7 WHO Regional Office for the Western Pacific, data received from the technical units.</p> <p>8 Asia Pacific in Figures 2004. United Nations Economic and Social Commission for Asia and the Pacific (http://www.unescap.org/stat/data/apif/index.asp)</p>								