

## ISLAND OF GUAM

Department of Public Health & Social Services  
Data available through the Guam Diabetes Prevention & Control Program

**Diabetes:** Diabetes was the fourth leading cause of deaths on Guam in 2005, comprising 4.74 percent of deaths. Diabetes has been ranked as one of the 10 leading causes of deaths from 1985 – 2005. Behavioral Risk Factor Surveillance Survey (BRFSS) data from 2003 show Guam’s overall prevalence of diabetes to be 101 per 1,000 adults. Based on population projections, the number of persons with diabetes at this prevalence rate in 2004 would be at least 10,522. The vast majority of people with diabetes have type 2 diabetes, also known as non-insulin dependent diabetes. Persons with diabetes aged 40 and above account for over 85% of self reported diabetes cases in the 2003 BRFSS. Furthermore, diabetes is the most common cause of end stage renal disease and blindness.

### Frequency and Mortality of Diabetes Per 100,000 Population Guam 1992-2005

Year	# of Diabetes Deaths	Total Deaths	% of Deaths	Total Mid-point Population	Diabetes Mortality Rate per 100,000 Population*
1992	42	585	7.2	142,184	29.5
1993	51	576	8.9	143,618	35.5
1994	39	628	6.2	142,888	27.3
1995	29	626	4.6	143,856	20.2
1996	41	627	6.5	144,923	28.3
1997	31	639	4.9	146,328	21.2
1998	35	651	5.4	149,178	33.9
1999	25	724	3.5	151,965	16.45
2000	21	667	3.2	154,805	13.56
2001	19	691	2.8	158,330	12.00
2002	18	658	2.7	161,057	11.18
2003	19	700	2.7	163,593	11.61
2004	27	697	3.9	168,090	16.06
2005	33	697	4.7	168,564	19.58

Source: Office of Planning and Evaluation, DPHSS, Government of Guam

\*Non age-adjusted rate per 100,000 populations

### Prevalence of Diabetes Risk Factors by Age Guam 2003

Prevalence (% of Population with this condition)	18-24 yrs.	25-44 yrs.	45-64 yrs.	65+
Obesity	10.7	23.3	25.4	12.8
Smoking	33.5	37.1	26.2	19.3
Hypertension	5.1	11.9	39.9	50.8

High Cholesterol	15.5	19.5	43.3	51.5
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Source: Office of Planning and Evaluation, DPHSS, Government of Guam, 2003 BRFSS

**Prevalence of Diabetes by Sex and Population  
Guam 1996-2003**

Year	Diabetes Rates For Males per 1,000	Diabetes Rates for Females per 1,000	Prevalence per 100	Percent Change	Population
1996	43.25	62.73	5.2		144,923
1997	50.69	58.51	5.4	+3.8%	146,328
1999	55.3	125.80	9.8	+81.8%	151,965
2001	99.3	91.0	9.5	-3.1%	158,330
2002	87	81	8.4	-11.6%	161,057
2003	101	100	10.1	+32.1	163,593

Source: Office of Planning and Evaluation, DPHSS, Government of Guam, 2003 BRFSS

**Prevalence of Diabetes and Ethnicity  
Guam 1996 – 2003**

Ethnicity	Year					
	1996	1997	1999	2001	2002	2003
Chamorro	61.3	68.2	58.0	56.7	46.9	50.6
Filipino	22.6	9.1	18.0	10.4	20.3	15.2
White	3.2	13.6	4.0	6.0	3.1	5.5
Asian	3.3	0	0	0	7.8	11.4
Pacific Islander	7.6	4.5	8.0	10.5	9.4	6.9
Other	1.1	4.5	8.0	9.0	1.6	10.6

Source: Office of Planning and Evaluation, DPHSS, Government of Guam, BRFSS

The above data shows that the Chamorros (indigenous population) has the highest diabetes prevalence among the ethnic groups. There is no current data available to accurately determine the prevalence of diabetes among the Micronesian population (disparate group).

The data below shows a comparison of Guam vs. the US Nationwide Diabetes Prevalence Data from 2001 to 2009, through the Behavioral Risk Factor Surveillance System. Data for 2004 to 2006 is not available for Guam.

### Guam Prevalence of Diabetes 2001 – 2010

BRFSS Question: Have you ever been told by a doctor that you have diabetes?

Year	Yes	Yes, pregnancy – related	No	No, pre-diabetes or borderline diabetes
2010	11.0	0.7	87.1	1.2
2009	9.0	1.8	87.9	1.1
2008	7.8	2.0	87.8	2.2
2007	9.2	2.7	85.7	2.4
2006	NA	NA	NA	NA
2005	NA	NA	NA	NA
2004	NA	NA	NA	NA
2003	10.3	1.4	88.4	NA
2002	8.4	0.7	90.9	NA
2001	9.5	1.4	89.0	NA

Source: Guam Diabetes Prevention and Control Program, DPHSS, Government of Guam, 2001 – 2010 BRFSS, CDC

\* NA: Not Available

### NATIONWIDE (States, DC, and Territories) Prevalence of Diabetes 2001-2010

BRFSS Question: Have you ever been told by a doctor that you have diabetes?

Year	Yes	Yes, pregnancy – related	No	No, pre-diabetes or borderline diabetes
2010	8.7	0.8	89.0	1.2
2009	8.4	0.7	89.4	1.1
2008	8.2	0.8	89.9	1.0
2007	8.1	0.9	89.8	1.1
2006	7.5	0.8	90.5	1.0
2005	7.3	0.8	90.9	0.8
2004	7.1	0.9	91.0	0.9
2003	7.2	0.7	92.0	NA
2002	6.8	0.9	92.4	NA
2001	6.6	0.9	92.5	NA

Source: Guam Diabetes Prevention and Control Program, DPHSS, Government of Guam, 2001 – 2010 BRFSS, CDC

\* NA: Not Available

**106,073 estimated adult (18yrs and above) population for 2010.**

**Based on the 2010 BRFSS, Guam has a diabetes prevalence rate of 11%.**

**11% x 106,073 adult population = 11,668 estimated adults on Guam with Diabetes.**

### Guam Prevalence of Overweight and Obesity 2001 – 2010

BRFSS: Weight classification by Body Mass Index (BMI)

Year	Overweight (bmi 25.0 - 29.9)	Obese (bmi 30.0 - 99.8)	Total Overweight + Obese
2010	32.6	27.6	60.2
2009	34.4	26.8	61.2
2008	34.3	27.0	61.3
2007	36.4	24.6	61
2006	NA	NA	NA
2005	NA	NA	NA
2004	NA	NA	NA
2003	36.2	21.9	58.1
2002	37.6	23.8	61.4
2001	39.9	21.2	61.1

Source: Guam Diabetes Prevention and Control Program, DPHSS, Government of Guam, 2001 – 2010 BRFSS, CDC

\* NA: Not Available

### NATIONWIDE (States, DC, and Territories)

### Prevalence of Overweight and Obesity 2001 – 2010

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Year	Overweight (bmi 25.0 - 29.9)	Obese (bmi 30.0 - 99.8)	Total Overweight + Obese
2010	36.2	27.6	63.8
2009	36.2	27.2	63.4
2008	36.6	26.6	63.2
2007	36.7	26.3	63
2006	36.5	25.1	61.6
2005	36.7	24.4	61.1
2004	36.9	23.2	60.1
2003	36.5	25.1	61.6
2002	37.2	22.2	59.4
2001	37.2	21.1	58.3

Source: Guam Diabetes Prevention and Control Program, DPHSS, Government of Guam, 2001 – 2010 BRFSS, CDC

\* NA: Not Available