

# Norton Sound Service Area



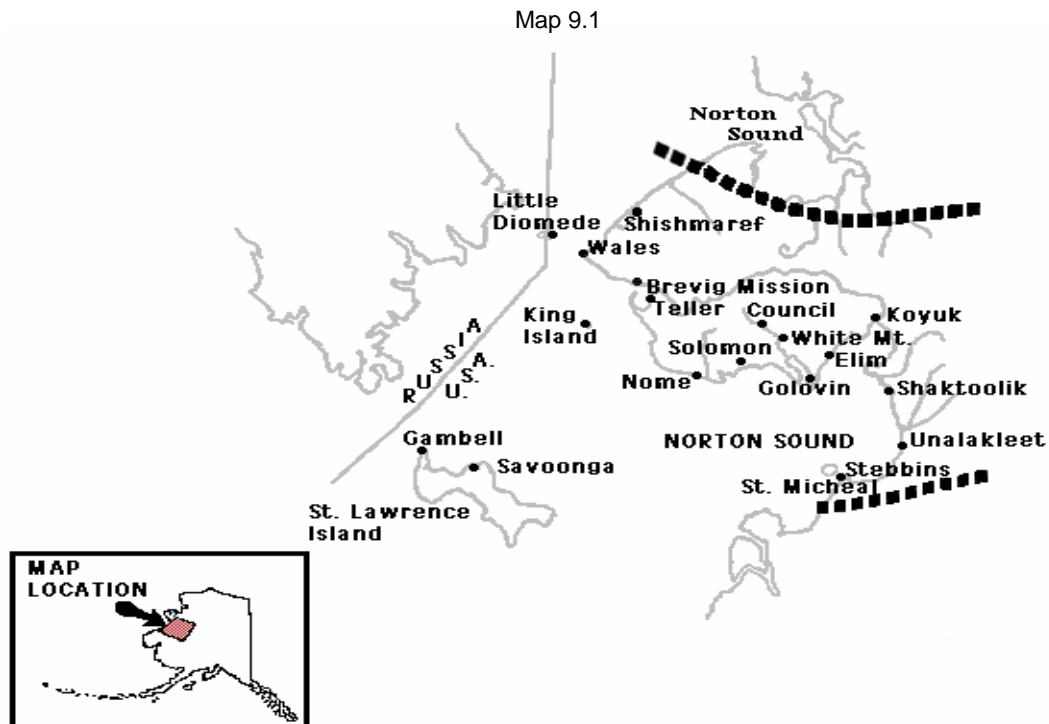
## OVERVIEW

### Alaska Native 2006 User Population.

<b>NORTON SOUND SERVICE AREA</b>	<b>7,406</b>
Norton Sound Health Corporation	7,406

Users are defined as beneficiaries who used a facility that reports through the Indian Health Service data system at least once between 10/1/2003 and 9/30/2006.

**Environmental Factors.** The Norton Sound Service Area covers about 23,088 square miles in Northwestern Alaska on the Seward Peninsula. The area extends into the Bering Sea toward Siberia and includes Little Diomedede Island, Gambell and Savoonga on St. Lawrence Island, 13 communities along the Bering Straits-Norton Sound coast and the regional center of Nome. Nome is on the south shore of the peninsula facing Norton Sound, 500 miles northwest of Anchorage.



Most of the Natives of the region are from three distinct language and cultural groups of Eskimos: Inupiaq, Central Yup'ik, St. Lawrence Yup'ik and Cup'ik. Nome contains about 30% of the Native population of the region. The remaining 17 communities vary in size from six summer residents in Council to 655 in Unalakleet. Most of the Native people living in the region's villages still rely heavily on subsistence harvests of land and sea for their existence.

A cool marine climate prevails in the summer, and the winters are cold. The mean January temperature is 4 degrees, with routine winter lows of -20 degrees to -40 degrees. Combined with the persistent year-round breeze, which averages 11 knots, the wind chill factor in the winter can reach -50 to -70 degrees. In July, the temperatures range from 50 to 70 degrees and are

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accompanied by seasonal rains. Spring and fall are short seasons of a month's duration. The coastal villages and Nome have shore-bound pack ice for about eight months of the year.

**Utilities.** Most of the villages and Nome have electricity in residential homes and in public buildings. Electricity is not available in the unincorporated villages of Solomon and Council, which each have less than 30 year-round residents.

Nome has a water and sewer system available to all the city's residents, excluding a few of the periphery settlement areas.

Nevertheless, several of the homes in Nome still use "honey buckets" for waste disposal and must have water delivered by truck or haul it themselves. Most of the villages have no central water or sewer systems. In lieu of a water and sewer system, almost all of the villages have a shower facility and a laundromat (often combined as a "Washateria"). A city building houses the washateria and usually the local government offices.

Table 9.1  
**Norton Sound Service Area  
Number of Homes With and Without Complete  
Water and Sewer Service<sup>1</sup>**

	# Homes With	# Homes Without	Total # of Homes <sup>2</sup>
<b>NORTON SOUND SERVICE AREA</b>	<b>745</b>	<b>631</b>	<b>1376</b>
	745	631	1376
<b>Norton Sound Health Corporation</b>			

<sup>1</sup>Complete service means operable plumbed indoor water and sewer service. Information applies only to year-round primary homes, including individual homes, duplexes and apartment units. Data from FY 2002.

<sup>2</sup>Exclude homes covered by urban local government water and sewer service. Source: Alaska Area Native Health Service, Office of Environmental Health.

**Transportation.** Daily jet service connects Nome and Anchorage. Small commuter "bush" planes provide the main transportation between Nome and the region's villages. Nome has about fifteen miles of paved roads. Three unpaved gravel roads extend from Nome about 70 miles in three different directions into the wilderness. In the summer, it is possible to drive north to the village of Teller and south to the village of Council. During the winter, residents of the area use snowmachines or dogsleds to traverse the frozen ground, rivers, lakes and even the Bering Sea. During the summer months, the community of Diomedes is accessible only by helicopter.

For approximately four months when the Bering Sea is ice free, barge and freight companies make deliveries of fuel, building materials, equipment, furniture, and supplies to Nome. Since Nome has no harbor, the freight must be unloaded from ships anchored 1.5 miles offshore. Barge transportation is also available to all coastal villages. All other transportation of supplies is by air freight.

**Housing.** Government quarters in Nome consist of two single family houses and a three-bedroom trailer. Housing in Nome is often difficult to obtain. Two hotels offer reasonable accommodations.

**Education.** Educational facilities in Nome include an elementary school, junior high, and high school. Every village of the region has schools offering grades kindergarten through 12. The City of Nome and many of the villages also have Head Start and preschool programs.



Nome's Northwest Campus of the University of Alaska-Fairbanks has an "distance learning" approach which uses audio conferencing capabilities and learning resource centers in villages. Instructors regularly travel to the villages to complete on-site coursework.

**Natural Resources.** Residents in the Norton Sound Service Area rely on natural resources from the land and sea. Mined resources on the Seward Peninsula include gold, tin and oil. Game, fish, sea mammals (walrus, seal and whale), and gathered berries comprise the natural subsistence harvest.

**Economic Conditions.** Nome is the commerce and government center for Northwest Alaska. The center of Alaska's reindeer industry is in the Nome area. State and Federal government, the gold mining industry, transportation, retail and tourism are the major contributors to employment. Nome is the end of the trail of the famed Iditarod Sled Dog Race held in March of each year. The race starts in Anchorage and ends in Nome more than 1,049 miles later.

Table 9.2  
**Norton Sound Area  
Education Status  
for the Population 25 Years and Over**

	Males	Females
White Alone Population:	132	57
High school graduate (includes equivalency)	287	258
Bachelors degree or higher		
AI/AN* Alone Population:	872	709
High school graduate (includes equivalency)	35	74
Bachelors degree or higher		

\*AI/AN=American Indian/Alaska Native  
Source: U.S. Census Bureau, P148A - White alone population; P148C - American Indian/Alaska Native alone population, Sex by educational attainment for the population 25 years and over, Census 2000 Summary File 3.

Table 9.3  
**Norton Sound Area  
Employment Status  
for Population 16 Years and Over**

	Males	Females
White alone population:		
In labor force	722	485
Employed	684	473
Unemployed	17	12
AI/AN* alone population:		
In labor force	1,211	1,112
Employed	810	952
Unemployed	395	160

\*AI/AN = American Indian/Alaska Native  
Source: U.S. Census Bureau, Census 2000 Summary File 3.

Table 9.4  
**Nome Census Area**

White alone population:	
Per Capita Income (1999)	\$34,791
Below Poverty Level	57
AI/AN alone population:	
Per Capita Income (1999)	\$10,603
Below Poverty Level	1,469

AI/AN = American Indian/Alaska Native  
Source: U.S. Census Bureau, Census 2000 Summary File 3.

**Federally Recognized Tribes.** The following are the federally recognized tribes in the Norton Sound Service Area:

- Native Village of Brevig Mission - General Delivery, Brevig Mission, AK 99785
- Chinik Eskimo Community (aka Golovin) - General Delivery, Golovin, AK 99762
- Native Village of Council - P.O. Box 2050, Nome, AK 99762
- Native Village of Diomedede, (aka Inalik) P.L. 93-638, Title I, - P.O. Box 7099, Diomedede, AK 99762
- Native Village of Elim - P.O. Box 39010, Elim, AK 99739
- Native Village of Gambell - P.O. Box 99, Gambell, AK 99762



King Island Native Community - P.O. Box 992, Nome, AK 99762  
Native Village of Koyuk - P.O. Box 30, Koyuk, AK 99753  
Native Village of Mary's Igloo - P.O. Box 572, Teller, AK 99778  
Nome Eskimo Community - P.O. Box 1090, Nome, AK 99762  
Native Village of Savoonga - P.O. Box 129, Savoonga, AK 99769  
Native Village of Saint Michael - General Delivery, St. Michael, AK 99659  
Native Village of Shaktoolik - P.O. Box 100, Shaktoolik, AK 99771  
Native Village of Shishmaref - P.O. Box 72110, Shishmaref, AK 99772  
Village of Solomon - P.O. Box 243, Nome, AK 99762  
Stebbins Community Association - P.O. Box 2, Stebbins, AK 99671  
Native Village of Teller - P.O. Box 590, Teller, AK 99778  
Native Village of Unalakleet - P.O. Box 70, Unalakleet, AK 99684  
Native Village of Wales - P.O. Box 549, Wales, AK 99783  
Native Village of White Mountain - P.O. Box 84082, White Mountain, AK 99784

## DESCRIPTION OF HEALTH-CARE DELIVERY SYSTEM

The Norton Sound Health Corporation (NSHC) organized in 1970 as a part of the Kotzebue Service Unit in partnership with the Indian Health Service, the State of Alaska and the Methodist-owned Maynard McDougall Memorial Hospital in Nome. During the summer of 1974, Norton Sound separated from the Kotzebue Service Unit. The division came as a result of the Alaska Native Claims Settlement Act which cut the Kotzebue Service Area into two regional corporations. It was a natural geographical split because Nome was a population center in the south and Kotzebue was a population center in the north.

**Norton Sound Regional Hospital**, P.O. Box 966, Nome, Alaska 99762

The Norton Sound Health Corporation (NSHC) currently owns and operates the *Norton Sound Regional Hospital* in Nome. The hospital connects to the “remains” of the 1948 *Maynard McDougall Memorial Hospital* which houses administration and dental. NSHC built the adjacent inpatient and outpatient space in 1977, and the State of Alaska assisted NSHC in building a long-term care wing in 1988. The outpatient space was remodeled in 1999 when four new exam rooms were added. The hospital is accredited by the The Joint Commission. The existing facility supports 18 acute care beds with a 14-bed nursing care wing (*Quyana House*), a 24-hour emergency room, and an attached outpatient clinic.

Ancillary and outpatient services include general x-ray, ultrasound, mammography, pharmacy, laboratory, respiratory therapy, optometry, dental, audiology, physical therapy, and nutrition. The outpatient clinic has one procedure room and ENT telemedicine capabilities. The specialty and tertiary referral location for the *Norton Sound Hospital* is the *Alaska Native Medical Center* in Anchorage.

Community health services provided by NSHC include behavior health outpatient assessment and treatment, social services, environmental health, public health nursing, home personal care attendants, alcohol recovery camp, sexual assault response team (SART), diabetes prevention, and HIV/AIDS early intervention. The NSHC operates the *Ilisagviq Health Aide Training Center* in Nome. Other community health services include infant learning, infant developmental



assessment and nutrition. The Mobile Adolescent Treatment Team provides intensive outpatient mental health counseling to the villages and Nome. Mental health staff spend up to three weeks in a village at a time.

NSHC operates a 10-bed residential facility for village pre-maternal patients waiting to deliver in Nome (*The Pre-Maternal Home*), and an 10-bed alcohol recovery transitional living facility (*Kusqi House*).

The *NSHC Emergency Medical Service* is a licensed critical care air ambulance providing transport from the villages to Nome, and from Nome to Anchorage.

The *Unalakleet Subregional Health Center* was opened in FY 2004 by NSHC. It is staffed by mid-level providers and has basic laboratory, pharmacy and radiology services. Itinerant physician, dental, physical therapy and optometry services are provided by NSHC providers. The *Unalakleet Subregional Health Center* is a HRSA Section 330 Community Health Center serving the community of Unalakleet.

All of the following Norton Sound community health aide clinics have HRSA Section 330 funding:

Brevig Mission	Golovin	Savoonga	Teller
Diomedes *	Koyuk	Shaktolik	Unalakleet
Elim	Nome	Shishmaref	Wales
Gambell	St. Michael	Stebbins	White Mountain

\* The Native Village of Diomedes manages the community health aide/practitioners in their community under a P.L. 93-638, Title I contract with the Indian Health Service.

## **NON-TRIBAL HEALTH AGENCIES AND FACILITIES AND TYPES OF SERVICES PROVIDED TO SERVICE POPULATION**

In addition to the Norton Sound Health Corporation, several other health and social service agencies operate in the region. Three State of Alaska public health nurses, one registered nurse and one community health aide are responsible for health promotion and disease prevention in the region. Two private dentists share an office in Nome, an Anchorage-based chiropractor makes monthly visits to Nome, and a private optometrist visits Nome and the villages every three to four months.

## **HEALTH SERVICES AND FACILITIES PLANNING ISSUES**

Despite the additions to the *Norton Sound Regional Hospital* completed in 1977, 1988 and 1999, the facility has less than half the projected space required to serve the Native population of the area. Current structures have significant deficiencies in their mechanical and electrical systems, handicapped accessibility, and compliance with codes and regulations. *The Norton Sound Regional Hospital* replacement is in the design phase of the Indian Health Service construction priority process.

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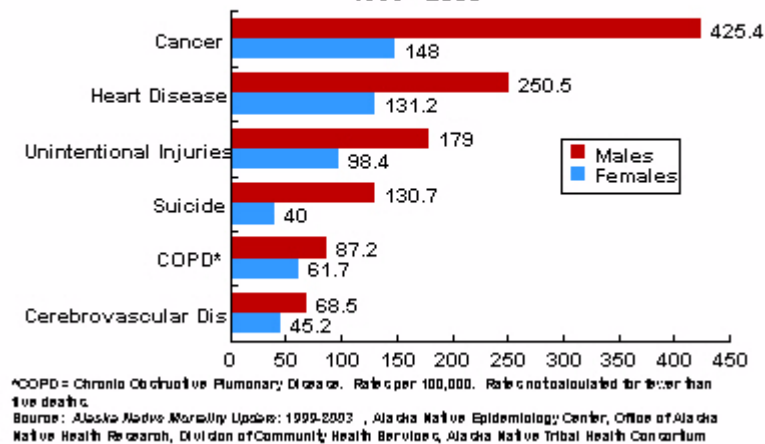


Only three villages, Unalakleet, Elim and Shaktoolik have complete water and sewer systems. For the homes without piped water and sewer, a typical bathroom is a honeybucket and a small washing basin with standing water. In some of the older houses, the bathroom is behind a curtain. The villages need water, sewer and waste disposal systems. Poor sanitation conditions have been determined to be the cause of periodic outbreaks of respiratory diseases.

## HEALTH STATUS OF ALASKA NATIVES LIVING IN THE NORTON SOUND SERVICE AREA

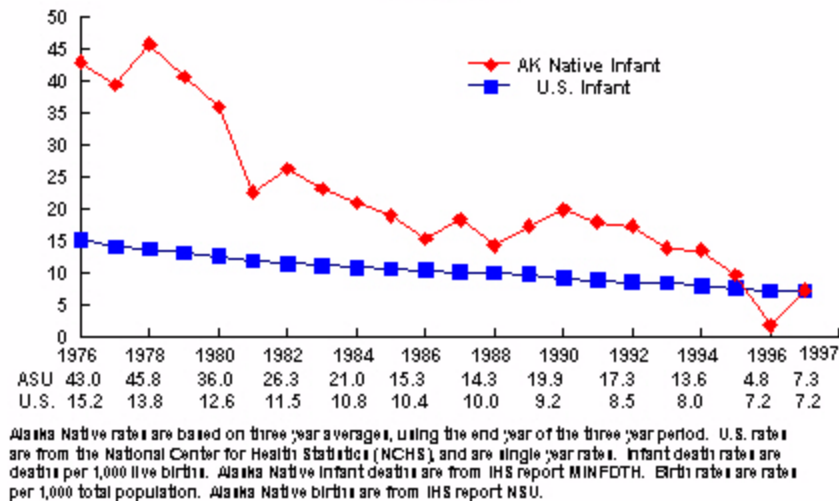
**Mortality** is defined as the number of deaths per 100,000 population.

Graph 9.1  
Norton Sound Area  
Age-Adjusted Alaska Native Mortality Rates  
1999 - 2003



**Infant Mortality** is defined as the number of infant deaths per 1,000 live births.

Graph 9.2  
Infant Mortality Rates  
Comparison of Norton Sound Service Area and U.S.  
1976 - 1997



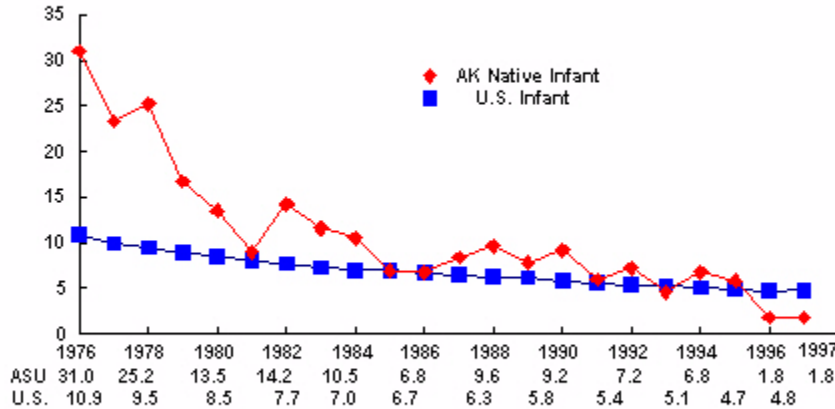




**Neonatal Mortality** includes infants less than 28 days of age.

Graph 9.3

### Neonatal Mortality Rates Comparison of Norton Sound Service Area and U.S. 1976 - 1997

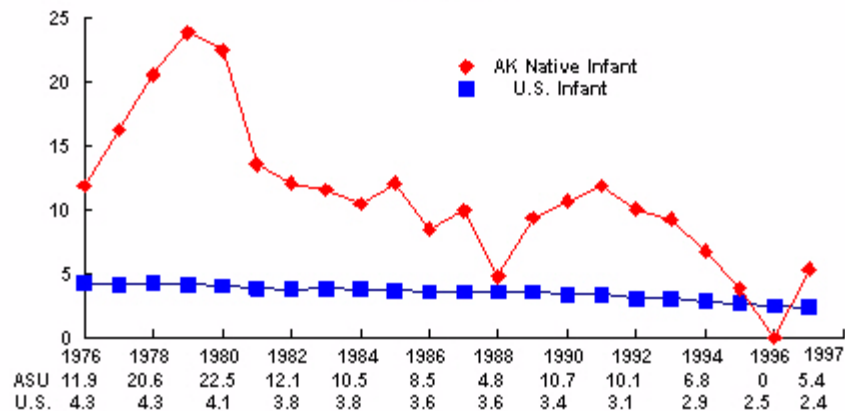


Alaska Native rates are based on three year averages, using the end year of the three year period. U.S. rates are from the National Center for Health Statistics (NCHS) and are single year rates. Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS report MINFDTH. Birth rates are rate per 1,000 total population. Alaska Native births are from IHS report NSU.

**Postneonatal Mortality** includes infants 28 to 365 days of age.

Graph 9.4

### Postneonatal Mortality Rates Comparison of Norton Sound Service Area and U.S. 1976 - 1997



Alaska Native rates are based on three year averages, using the end year of the three year period. U.S. rates are from the National Center for Health Statistics (NCHS) and are single year rates. Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS report MINFDTH. Birth rates are rate per 1,000 total population. Alaska Native births are from IHS report NSU.

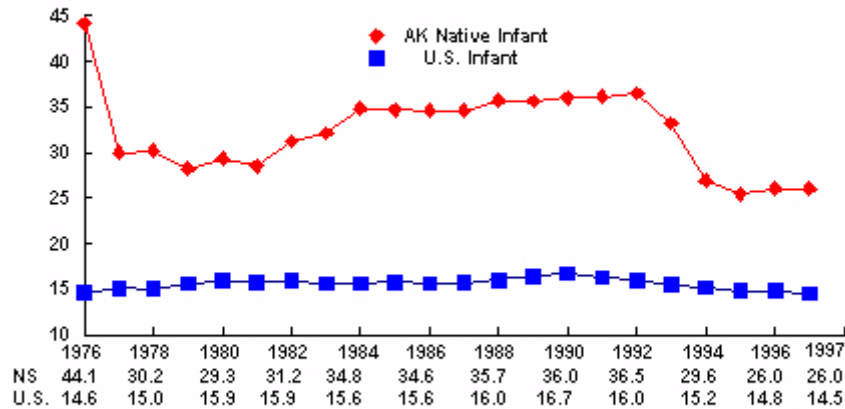
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Birth Rates are the number of births per 1,000 population.

Graph 9.5

## Birth Rates Comparison of Norton Sound Service Area and U.S. 1976 - 1997

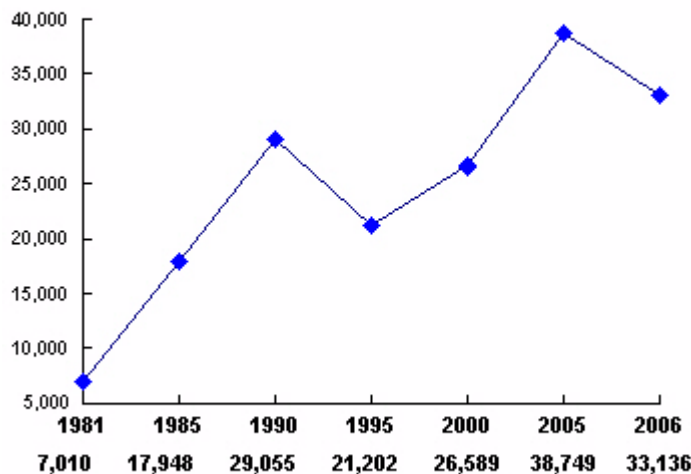


NS = Norton Sound. Birth rates are rate per 1,000 total population. Alaska Native births are from IHS report NSU-01. The three year average is the end year of the three year period. U.S. rates are from the National Center for Health Statistics (NCHS) and are single year rates.

**OUTPATIENT WORKLOAD/DIAGNOSES** are reported from the local Meditech data system:

Graph 9.6

## Norton Sound Regional Hospital Outpatient Workload: FY 1981 - FY 2006



Source: Indian Health Service automated Outpatient Reporting System in Albuquerque, APC Report 1A and some years are from the Norton Sound Hospital local data system.

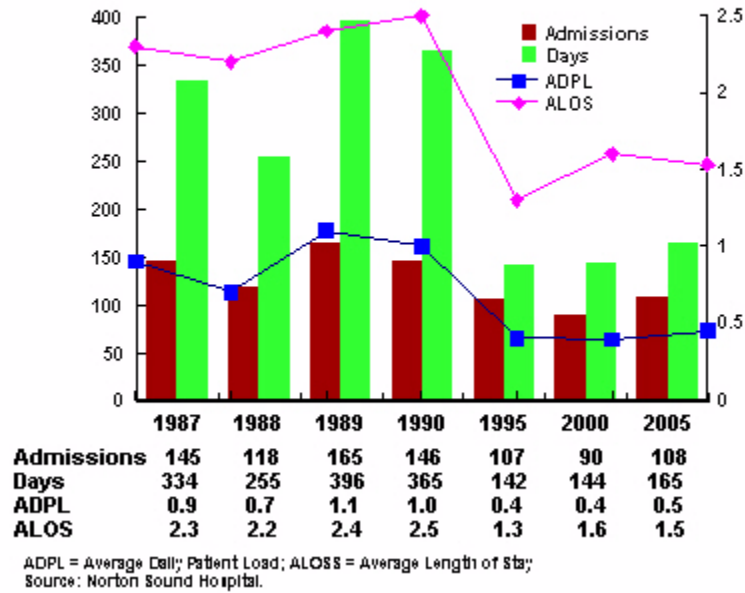




**INPATIENT WORKLOAD** for Norton Sound Regional Hospital is reported from the local Meditech software.

Graph 9.7

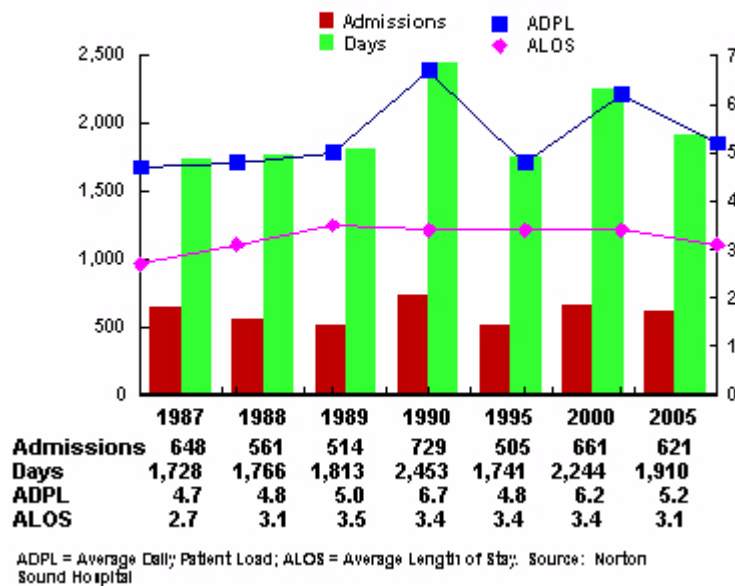
### Norton Sound Regional Hospital Newborn Inpatient Workload FY 1987 - FY 2005



Meditech inpatient data excluding newborns:

Graph 9.8

### Norton Sound Regional Hospital Inpatient Workload Excluding Newborns FY 1987 - FY 2005





## DISCHARGE DIAGNOSES

Table 9.5

### Norton Sound Hospital - Leading Causes of Discharges: FY 2001 - FY 2004

	FY 2001	FY 2002	FY 2003	FY 2004
Deliveries (Childbirth)	77	104	99	101
Pneumonia	42	36	35	54
Accidents & Injuries	32	59	49	53
Alcohol Abuse	16	20	24	36
Bronchitis, Emphysema	22	35	19	28
Psychoses	19	37	24	22
Heart Disease	24	27	16	21
Infected Skin & Abrasions	11	25	25	21
Neuroses & Personality Disorders	14	0	15	20
Complications of Pregnancy	17	22	24	18

Source: Indian Health Service Inpatient/Outpatient Reporting System in Albuquerque, APC Report 2C.