

# Alaska's Health Care Industry

by  
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## An amazing job machine

**T**he health services industry is the fastest growing, and one of the larger sectors of Alaska's economy. It's a billion-dollar industry, and it employs about 22,000 people. It would be hard to find an industry in Alaska with a growth pattern as strong and sustained as that of health care.

Employment settings range from private practice physicians with one employee to large urban hospitals providing hundreds of diverse jobs. Health related occupations include many specializations and have a wide variety of educational and skill requirements. Employment is widely distributed throughout the state, making health related careers viable choices in both urban and rural Alaska. (See Exhibit 1.)

This article will look at health related employment in two ways. First the spotlight will focus on the number of workers employed in Alaska's health services industry, regardless of whether or not the jobs they perform are health related. (For example, a secretary or maintenance worker at a hospital is included in health services industry employment.) Then, using the results of the Alaska Department of Labor and Workforce Development's (DLWD) 2000 – 2010 occupational forecast, we will look at the number and variety of health related jobs across all industries.

## It is on a fast track

Today more than 21,700 people work in Alaska's wage and salary health services industry. That number is conservative, because the data do not

## Health Services Employment 2002\*

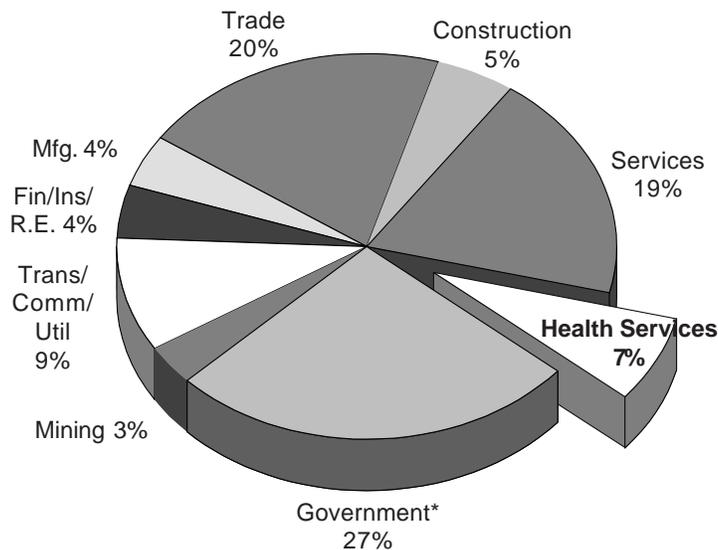
	Jobs
State	21,615
Aleutians East Borough	56
Aleutians West Census Area	74
Municipality of Anchorage	11,271
Bethel Census Area	1,117
Bristol Bay Borough	7
Denali Borough	11
Dillingham Census Area	357
Fairbanks North Star Borough	2,160
Haines Borough	54
Juneau Borough	1,079
Kenai Peninsula Borough	1,542
Ketchikan Gateway Borough	421
Kodiak Island Borough	287
Lake and Peninsula Borough	n/a
Matanuska-Susitna Borough	1,088
Nome Census Area	429
North Slope Borough	n/a
Northwest Arctic Borough	518
Prince of Wales Census Area	59
Sitka Borough	644
Skagway-Hoonah-Angoon Census Area	26
Southeast Fairbanks Census Area	42
Valdez-Cordova Census Area	176
Wade Hampton Census Area	n/a
Wrangell-Petersburg Census Area	197
Yakutat Borough	n/a
Yukon Koyukuk Census Area	n/a

n/a = not available because of employers categorized outside the Health Care industry.

\* Based on employers in the health services industry. Does not include health care workers in government and nonprofit agencies outside of the health services industry classification. Based on first 9 months of 2002 data.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## 2 Health Services is a Big Player In Alaska's employment picture



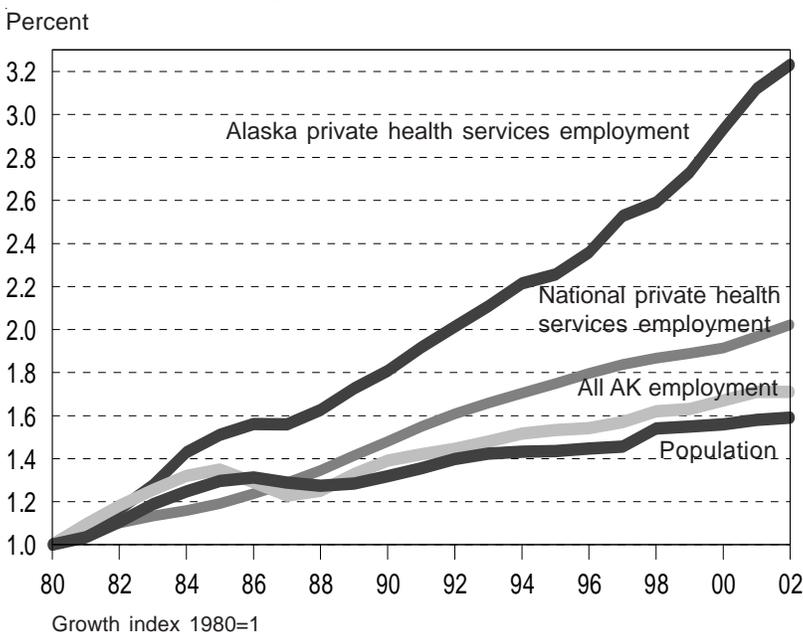
\*Public health care employment was subtracted from government and added to health services

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

include uniformed military personnel, or the self-employed. Furthermore, because of the way employee numbers are reported, some health care workers are counted under other industries, and not under health services. In 2002 more than seven percent of all wage and salary employment was in health services, making health services a larger employer than either construction or civilian federal government. (See Exhibit 2.) According to the 1997 U.S. Economic Census (the most recent data), total receipts for Alaska's health services industry were \$1.8 billion.

From 1992 to 2002 the number of health services industry wage and salary jobs increased from 13,400 to 21,700. Health services employment grew by 62 percent, more than three times as fast as the all-industry growth rate of 18 percent. This accelerated growth did not begin during the past decade, but has been with us for at least three decades. During the state's worst recession (1986-1988) when more than 20,000 jobs were lost in the economy, health services employment growth stalled for a year and then resumed its impressive upward trend, giving health services a nearly recession-proof quality.

## 3 Health Services Employment Growth Is in a league all its own



Growth index 1980=1

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Employment growth in Alaska's health services sector outstripped population growth over the 1980-2002 period. (See Exhibit 3.) Nationwide the health services industry has been one of the more dynamic sectors, but in Alaska from 1992-2002 it grew much faster than in the rest of the nation.

### So why all this growth in health care?

There is no single explanation for this degree of growth or for Alaska's growth being so much more accelerated than the nation's. Health care, as an indispensable service, does not fit the classic economic model of supply and demand. In a similar vein, the method used to pay for these services is very different from buying typical consumer goods. Payment of these services is usually made by a third-party payer instead of by the patient directly. Since the consumer of the services rarely pays directly for them, cost is often not a key consideration when purchasing these services. The delivery of most health care is also

different from most other services. Combinations of private for-profit, private nonprofit, and public providers usually perform this service, giving it a unique character. (See Exhibit 4.)

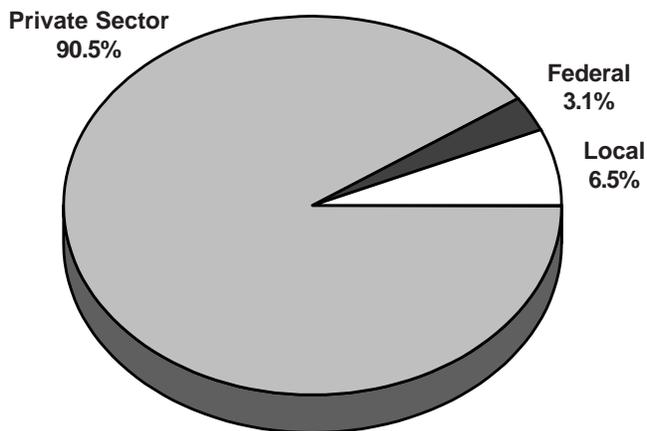
Supply and demand conditions do help explain some of the spectacular increases in health services employment. Technological changes are boosting the demand for health care services. The number of medical procedures continues to grow as more remedies are found for health problems. Another powerful ingredient is demographics, as the population continues to age. Between 1990 and 2000, Alaska's 65-plus population grew nearly 60 percent, and a repeat of this increase is expected in the decade ahead. (See Exhibit 5.) Alaska has a smaller slice of its population over 65 than does the nation as a whole, but Alaska's senior population is growing faster than their national counterpart. This may well be one reason health services employment is growing faster in the state.

### More reasons for growth

Another factor associated with the more rapid growth in health services employment in Alaska than in the rest of the nation is "import substitution." An increasing share of Alaska's health care needs formerly taken care of outside of the state is now met locally. Industry growth presents more health care choices, causing more of Alaska's health care dollars to be spent in the state, which stimulates further industry expansion. Since the health services share of total employment remains smaller in Alaska than nationwide, Alaska's trend of faster growth may well continue. (See Exhibit 6.)

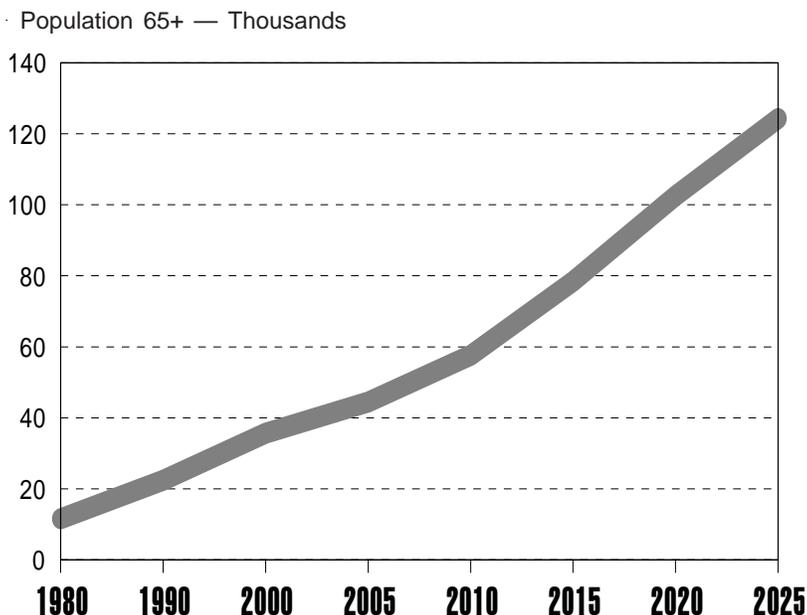
Another boost to growth in health services has come with the privatization and expansion of the Alaska Native Medical Center in Anchorage. (See Exhibit 7.) The number of federal employees at this facility has actually declined steadily since the late 1990s, but the increase in private nonprofit workers at the Center has more than made up for the losses. One of the organizations that took over the federal role was the Alaska Native Tribal Health Consortium, established in late 1997 and now having more than 700 employees, making it one of the state's largest health care providers.

## Most Health Services Employment Is in the private sector—2002 **4**



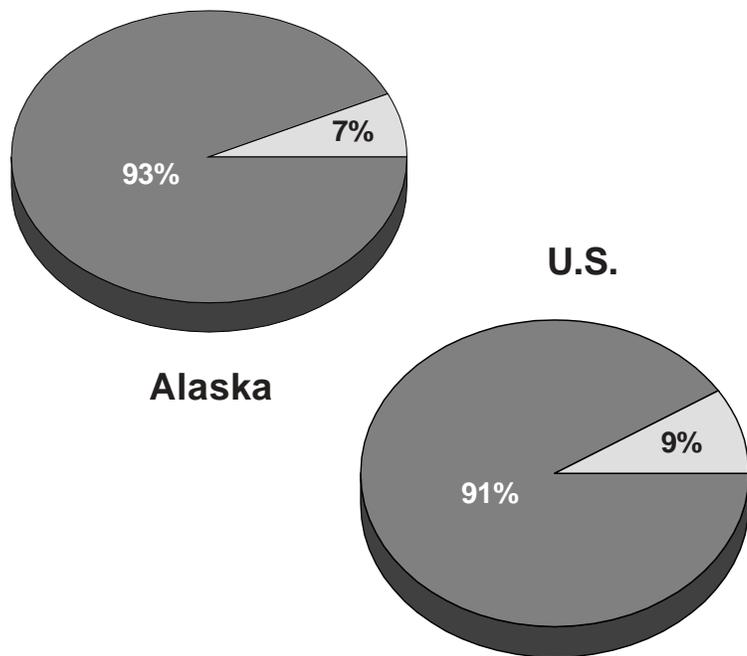
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## Aging Population Means Growing demand for health services **5**



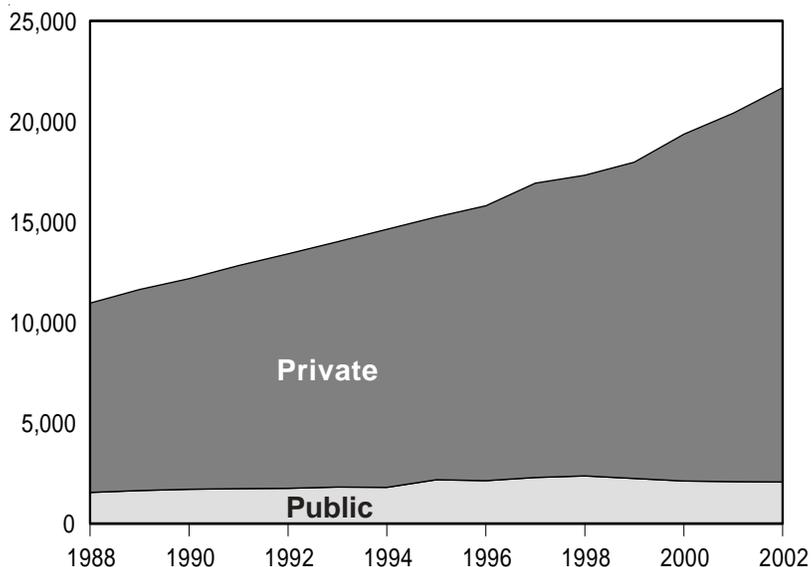
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## 6 Alaska Health Services Employment Grows toward national norms



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section  
U.S. Bureau of Labor Statistics

## 7 Private Sector Grows the Most In health services



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

(See Exhibit 8.) The Southcentral Health Foundation, which is also responsible for delivering many of the health care services of the health care employer, more than tripled the size of its workforce in less than five years.

### Hospitals are the big players

In 2002, hospitals were responsible for nearly 44 percent of all wage and salary employment in the state—not greatly different from the rest of the nation. (See Exhibit 9.) In Alaska, approximately 21 percent of hospital employment consists of government employees; the biggest group is employed in local public hospitals and most of the rest are employed at the Alaska Native Medical Center. No other segment of health services gets even close to hospitals' dominance. According to the 1997 Economic Census, \$1 billion was paid to hospitals in Alaska, representing 56 percent of all health care receipts.

One reason that hospitals are such big employers is they provide around-the-clock care and are very labor intensive. Three shifts of workers cycle through these hospitals each day. Because of this labor intensity it is not unusual for hospitals to be the largest or near largest employer in a community. In fact, in 2001 Providence Hospital became the single largest private sector employer in the state. Other examples are Banner Health Systems in Fairbanks and Kakanak Hospital in Dillingham, the largest private sector employers in their respective communities. In 2001 five of the 100 largest private sector employers were hospitals. If public hospitals were included, they too would often be one of the top employers in their respective geographic areas.

Over the past decade hospital employment in Alaska has grown considerably faster than in the rest of the nation. But hospital employment has not always been immune from cutbacks. In 1994, a number of hospitals pared back their workforces and hospital employment actually fell. Changes in Medicare and the move from inpatient to outpatient care hit some hospitals. They resumed growing in 1995. The traditional hospital model hardly exists today. An increasing share of hospital

## Top 25 Health Services Employers - 2002\*

activity is tied to outpatient care. Hospitals are branching out and opening day clinics and other health care facilities not often associated with hospitals of the past. The average annual earnings in the hospital sector are higher than average annual earnings in the broader health services industry category. (See Exhibit 10.)

### A large slice of health services workers are in doctor and dentist offices

More than a third of all health services employees work in doctor and dentist offices. Over the past decade employment in doctors' offices has more than doubled, making it one of the fastest growing segments of the health services industry. The proliferation of outpatient care facilities in the past decade may explain some of this growth. Like hospitals, these "doctor's offices" sometimes look very different from the past. Some look like hospitals minus the inpatient care. Employment in dentists' offices has increased much more moderately than the overall average. Both of these segments represent a bigger slice of the Alaska health services pie than they do nationally. The reasons for this are not entirely clear.

### Employment for other health care practitioners more than doubles

Included in this category are such health care providers as chiropractors, optometrists, podiatrists, psychologists, acupuncturists, naturopaths and others. It is not a large group but it is growing fast—more than doubling during the past decade. The growing popularity of alternative medicine is pushing these numbers higher, along with increases coming from some of the more traditional practitioners.

### Nationally, nursing facilities still grow

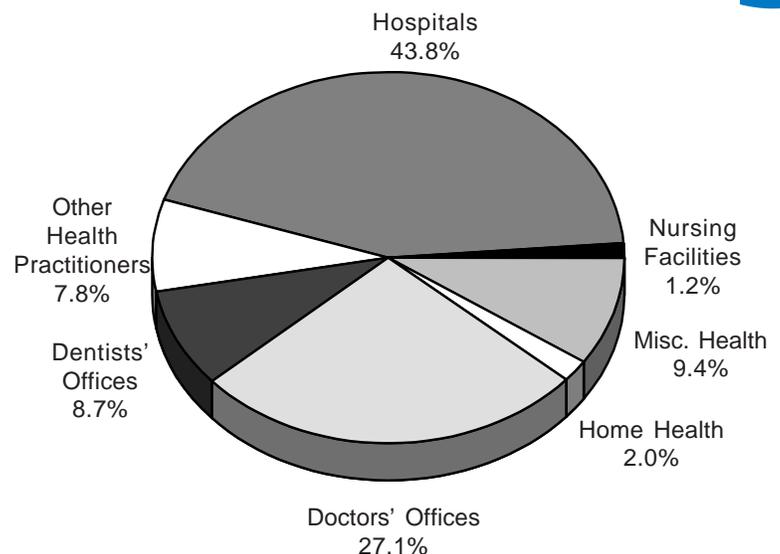
Nationally, nursing facilities represent a much larger proportion of health services employment than in Alaska. Part of this difference may be explained by data shortcomings. Many of the nursing facilities in Alaska are run by the state, such as the Pioneer Homes, which means that this

1	Providence Health Systems in Alaska	3,617
2	Banner Health Systems	1,195
3	Yukon Kuskokwim Health Corporation	1,097
4	Alaska Regional Hospital	893
5	Southcentral Foundation	872
7	Alaska Native Tribal Health Consortium	737
8	Southeast Alaska Regional Health Consortium	664
9	Manilaq Association	516
10	Valley Hospital	492
11	Norton Sound Health Corporation	420
12	Bartlett Regional Hospital	392
13	Central Peninsula General Hospital	370
14	Bristol Bay Area Health Corporation	350
15	Ketchikan General Hospital	307
16	Anchorage Community Health Services	262
17	North Star Behavioral Health System	254
18	Tanana Valley Medical Surgery Group	247
19	South Peninsula Hospital	241
20	South Peninsula Mental Health Association	141
21	Consumer Direct Services	130
22	Central Peninsula Counseling Services	116
23	Sitka Community Hospital	113
24	Anchorage Neighborhood Health Center	111
25	Fairbanks Community Mental Health Center	109

\*Average of first nine months

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## Where the Jobs Are In Alaska's health services - 2002\*

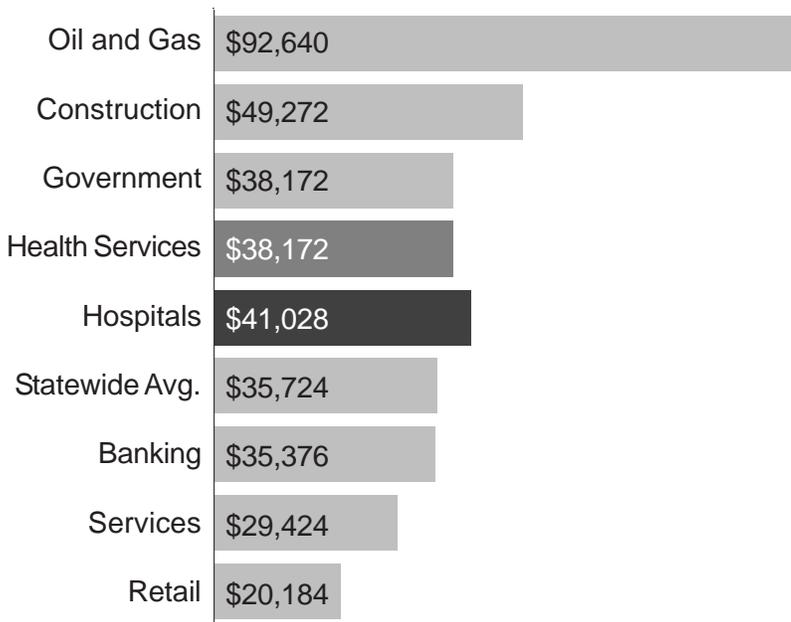


\*Average of first nine months

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

# 10 Health Services Industry Earnings - above average

Average annual earnings —2001



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

employment is captured in state government and not health services. Other nursing facilities such as the Providence Extended Care Center in Anchorage and the Denali Center in Fairbanks are connected to hospitals and are counted under hospital employment. The collocation of hospitals and nursing facilities around the state is quite common. One real difference is demographics. The 65-plus population is one of Alaska's fastest growing demographic groups, but only 5.7 percent of the state's population is 65 or older compared to 12.4 percent for the rest of the nation. The rapid growth of this population means these facilities are likely to grow more rapidly in the future and absorb a growing proportion of health services.

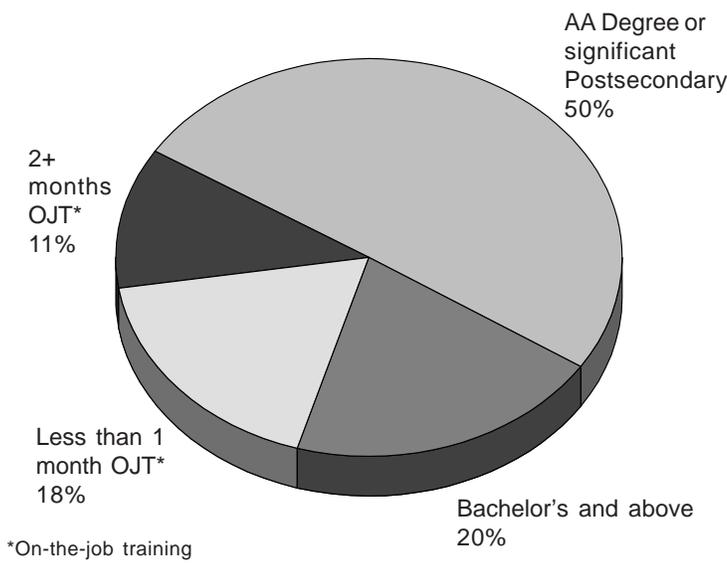
## Health care occupations – a more detailed look at employment

Based on DLWD's most recent occupational forecast, Alaska occupational employment is projected to increase 16.7 percent from 302,255 to 352,693 between 2000 and 2010. (This includes an estimate of self-employed workers.) Alaska employment for health related occupations, across all industries, is expected to increase 78 percent from 15,982 to 28,466 for the same time period. Future demand for health care workers will be affected by major economic, demographic and social forces, forces that will continue to shape not only the nature of the health care workforce but also the manner in which services are provided.

The 42 health care occupations reviewed in this article fall into two broad occupational categories: 1) *health care practitioner and technical occupations* and 2) *health care support occupations*. Although concentrated in the health services industry sector, jobs in health-related occupations are found throughout the economy including the federal, state, and local government, and business services industry sectors, and they encompass a wide range of employment settings, skill levels and job requirements.

The economy will continue to generate jobs for health care workers at a variety of education and

# 11 Future Alaska Health Care Jobs By education level required - 2010



\*On-the-job training

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

# Health Care Occupations **12**

By education, employment, wages

training levels. (See Exhibit 11.) Fifty percent of health related jobs in 2010, dominated by Registered Nurses\* and a variety of health care technician occupations, will require an associate degree or significant postsecondary vocational training. One in five will require a bachelor's degree or higher; these include health care practitioner occupations such as Physical Therapists and Physicians. The remaining jobs include health care technical and support occupations and require varying levels of on-the-job training.

## Outlook for health related occupations is good

The projected job growth in health care services reflects an aging population, technological advances in medicine, cost cutting measures and increasing administrative requirements. Even though the overall demand for health care services is projected to rise significantly, future need for individual health occupations will vary. The growth rates for specific occupations range from an increase of nearly 165 percent for medical assistants to a decline of 8 percent for Orthotists & Prosthetists.

Nursing Aides, Orderlies & Attendants, and Registered Nurses, the two largest health related occupations in 2000, together will contribute nearly 5,000 new jobs over the forecast period. (See Exhibit 12.) Population growth and aging are expected to be the primary factors driving this increase.

Cost containment in the health care industry will stimulate employment for health related aides and assistants. Some services formerly provided by specialists such as Physical Therapists, Dentists, Pharmacists, and Physicians will be shifted to lower-paid workers. The rapid growth for medical assistants, projected to be Alaska's single fastest growing occupation, reflects this trend. With a projected growth rate of 139 percent, Physical Therapy Aides are expected to grow significantly faster than physical therapists over the forecast period. The number of Medical Records & Health Information Technician positions will climb

\*Based on US Bureau of Labor Statistics classification, all RNs are grouped in the Associate Degree category.

	2001 Statewide Wage Quartile	Employment			
		Wage Quartile	2000	2010	Numeric Change
	\$ Less than \$12.35				
	\$ \$ \$12.35 - \$16.71				
	\$ \$ \$ \$16.72 - \$23.83				
	\$ \$ \$ \$ \$23.84 & higher				
<b>Bachelor's and Above</b>					
Physical Therapists	\$\$\$\$		276	535	259
Pharmacists	\$\$\$\$		332	535	203
Medical & Clinical Laboratory Techs	\$\$\$\$		270	452	182
Dentists	\$\$\$\$		346	490	144
General Practitioners	\$\$\$\$		217	331	114
Internists, General	\$\$\$\$		136	244	108
Occupational Therapists	\$\$\$\$		138	243	105
Physician Assistants	\$\$\$\$		157	233	76
Dietitians & Nutritionists	\$\$\$\$		100	173	73
Speech-Language Pathologists	\$\$\$\$		201	272	71
Chiropractors	N/A		143	193	50
Optometrists	\$\$\$\$		88	126	38
Audiologists	\$\$\$\$		34	71	37
Veterinarians	\$\$\$\$		162	190	28
Psychiatrists	\$\$\$\$		47	69	22
Occupational Health/Safety Workers	\$\$\$\$		173	178	5
Orthotists & Prosthetists	\$\$\$\$		101	93	-8
<b>Associate Degree or Significant Postsecondary Vocational training</b>					
Registered Nurses	\$\$\$\$		4,439	8,556	4,117
Medical Records & Health Info Techs	\$ \$		375	746	371
Dental Hygienists	\$\$\$\$		403	753	350
Licensed Practical Nurses	\$ \$ \$		487	750	263
Radiologic Techs	\$ \$ \$		289	545	256
Medical Transcriptionists	\$ \$ \$		241	439	198
Respiratory Therapists	\$ \$ \$		108	212	104
Medical & Clinical Laboratory Techs	\$ \$ \$		141	242	101
Surgical Technologists	\$ \$ \$		96	195	99
EMTs & Paramedics	\$ \$		323	409	86
Massage Therapists	\$ \$		193	270	77
Physical Therapist Assistants	\$ \$		49	120	71
Diagnostic Medical Sonographers	\$\$\$\$		64	129	65
Cardiovascular Techs	\$ \$ \$		46	107	61
Veterinary Techs	\$ \$		87	108	21
<b>Med - or Long-term Training or Experience</b>					
Dental Assistants	\$ \$		619	1,465	846
Medical Assistants	\$ \$		366	968	602
Pharmacy Techs	\$ \$		300	519	219
Opticians, Dispensing	\$ \$ \$		182	257	75
<b>Short-term Training or Experience</b>					
Nursing Aides, Orderlies & Attendants	\$ \$		1,196	2,059	863
Home Health Aides	\$		858	1,260	402
Physical Therapist Aides	\$ \$		54	129	75
Medical Equipment Preparers	\$ \$		64	125	61
Veterinary Assistants	\$		137	165	28
Pharmacy Aides	\$		45	53	8

Shading denotes occupations with higher than average wages and estimated growth rates, and projected increase of 75 or more between 2000 and 2010.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

# 13 Health Care Occupations

## Nonresident\* & over-45 workers

### 2001

\*Did not receive a 2001 or apply for a 2002 Alaska Permanent Fund dividend

	% of Workers 45 and Over	% Non- Resident Workers	Training Available in Alaska
<b>Bachelor's and Above</b>			
Physical Therapists	26.9	16.9	
Pharmacists	44.8	18.4	
Medical & Clinical Laboratory Techs	59.7	19.1	Yes
Dentists	N/A	N/A	
General Practitioners	43.2	25.1	
Internists, General	37.0	21.2	
Occupational Therapists	35.7	16.4	
Physician Assistants	55.1	22.4	Yes
Dietitians & Nutritionists	33.0	9.0	Yes
Speech-Language Pathologists	50.5	16.2	
Chiropractors	52.4	35.7	
Optometrists	41.2	15.8	
Audiologists	60.0	0.0	
Veterinarians	35.4	15.8	
Psychiatrists	52.2	14.2	
Occupational Health/Safety Workers	N/A	N/A	
Orthotists & Prosthetists	50.0	50.0	
<b>Associate Degree or Significant Postsecondary Vocational Training</b>			
Registered Nurses	52.8	17.7	Yes
Medical Records & Health Info Techs	27.6	12.0	Yes
Dental Hygienists	37.5	9.5	Yes
Licensed Practical Nurses	53.2	13.3	Yes
Radiologic Techs	37.9	23.8	
Medical Transcriptionists	54.7	6.2	Yes
Respiratory Therapists	39.5	15.3	
Medical and Clinical Laboratory Techs	33.6	13.0	Yes
Surgical Technologists	39.0	29.1	
EMTs & Paramedics	22.0	14.8	Yes
Massage Therapists	39.2	14.8	Yes
Physical Therapist Assistants	20.0	10.0	
Diagnostic Medical Sonographers	40.0	17.2	
Cardiovascular Techs	43.5	19.2	
Veterinary Techs	8.2	19.1	
<b>Med - or Long-term Training or Experience</b>			
Dental Assistants	19.0	11.6	Yes
Medical Assistants	21.4	12.3	Yes
Pharmacy Techs	21.7	11.7	
Opticians, Dispensing	28.6	10.6	
<b>Short-term Training or Experience</b>			
Nursing Aides, Orderlies & Attendants	31.1	9.1	Yes
Home Health Aides	32.6	12.2	Yes
Physical Therapist Aides	24.1	13.3	
Medical Equipment Preparers	40.0	10.5	
Veterinary Assistants	19.9	16.2	
Pharmacy Aides	17.8	5.3	

Shading denotes occupations with higher than average wages and estimated growth rates, and projected increase of 75 or more between 2000 and 2010.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

to more than 700 by 2010, reflecting heightened medical records scrutiny by third-party payers, courts and consumers.

Employment of home health workers, such as Home Health Aides, will increase as more individuals choose to remain in their homes rather than move to long-term care or assisted living facilities.

Only one health related occupation is expected to experience an employment decline over the forecast period. The specialty occupation of Orthotists & Prosthetists will shed eight jobs, with a projected employment level of 93 in 2010. This decrease in occupational employment will result from a continued shift of orthopedic and prosthetic work to other health care occupations such as Occupational and Physical Therapists.

## Replacement needs

In addition to new jobs resulting from employment growth, job opportunity also results from the need to replace workers who retire, enter other occupations, or leave the labor force for other reasons. Retirement, and thus the age of incumbent workers, plays a major role in the future need for workers in high skilled occupations. Ten of the 17 health related occupations requiring a BA or more face major future workforce replacement needs. Based on 2001 data, over 40 percent of the workers in these occupations will reach retirement age within the next 15 years. Of the health related occupations requiring either an AA degree or significant postsecondary vocational training, one-third face similar replacement needs. (See Exhibit 13.)

Retirement plays a lesser role in determining replacement needs for workers in the lower skilled health related occupations. Workers in these occupations are more apt to transfer to other occupations than remain in the occupation until retirement age. For occupations requiring on-the-job training, the percentages of workers nearing retirement are generally lower than for higher skilled occupations. The degree of transition in and out of the lower skilled occupations

depends in part on the relative attractiveness of other entry level jobs and general economic conditions.

### Nonresidents capture many top jobs

Exhibit 13 lists the percentage of nonresident health care workers by occupation in 2001. Nonresident employment in high-wage/high-growth occupations such as Physical Therapists (nearly 17 percent nonresident employment) and Pharmacists (over 18 percent nonresident employment) represent lost opportunity for Alaska's workers.

### Wages vary widely

Earnings in health related occupations vary widely based on education and skill attainment. (See Exhibit 12.) All of the health related occupations requiring a BA or above had estimated earnings in the highest wage quartile. Dentists and Physicians whose wages are reported to DLWD earn more than \$55 per hour, but unreported self-employed earnings could raise that figure considerably.

Ten of the 15 health related occupations requiring an associate degree or significant postsecondary education pay wages higher than the average for all occupations, more than \$16.71 per hour. The Dispensing Opticians occupation is the only on-the-job training occupation that generally pays more than the all-occupation average wage. (See Exhibit 12.)

### In-state training availability

High-skill/high-wage health occupations require specific training and/or education, often leading to certification or licensure. Of the 17 health related occupations offering both good employment opportunity and higher than average wages, noted by shading on Exhibits 12 and 13, training is available in Alaska for only seven. (See Exhibit 13.)

## Conclusion

Alaska's health care industry, employment star of the 1990s, will continue to generate job opportunities throughout the coming decade. Health related employment exists in all regions of the state, requiring varying levels of education and training. Future employment opportunities will arise from both employment growth and the need to replace retiring workers.

### **Nurses working in Alaska in 1997 *Where were they in 2002?***

Given the difficulty in filling nursing positions, the need to retain incumbent workers has received increasing attention. DLWD analyzed 1997 and 2002 administrative data to help shed light on the career attachment of Alaska's nurses.

#### **Of the RNs working in Alaska in 1997 — In 2002**

- 47% Working as RNs in Alaska
- 8% Working in other health related occupations (such as medical and health services managers)
- 5% Working in non-health related occupations
- 40% Not working in Alaska wage and salary jobs

#### **Of the LPNs working in Alaska in 1997 — In 2002**

- 35% Working as LPNs in Alaska
- 14% Working in other health occupations (such as nursing aides & orderlies)
- 6% Working in non-health related occupations
- 43% Not working in Alaska wage and salary jobs