

# 2013 Healthcare Workforce Report



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## **Background**

Recognizing the importance of a highly trained and available health care workforce, the South Dakota Department of Health established the Health Care Workforce Center to help address the health care workforce needs of the State. The purpose of the Center is to function as a clearinghouse for health care workforce-related data and information. The Center is also designed to develop and implement programs and projects that assist individuals, agencies and facilities in their efforts to ensure a competent and qualified health care workforce to meet the health needs of all South Dakota residents.

Based on population and employment statistics, projections indicate that thousands of health care workers will be needed in the health care industry in the next decade. This profile of health care professions serves as an aid in planning for the health care workforce needs in the future. The report draws upon labor statistics, educational preparation data, and current health professions' licensing registries. The report profiles the health care workforce projected needs in the future and workforce distribution by geography, age, and profession. The report is designed to be used by policy-makers in the development and coordination of health care education and recruitment programs to meet the health care workforce needs of the future.

For more information contact the Health Care Workforce Center at the Department of Health at (605) 773-3361.

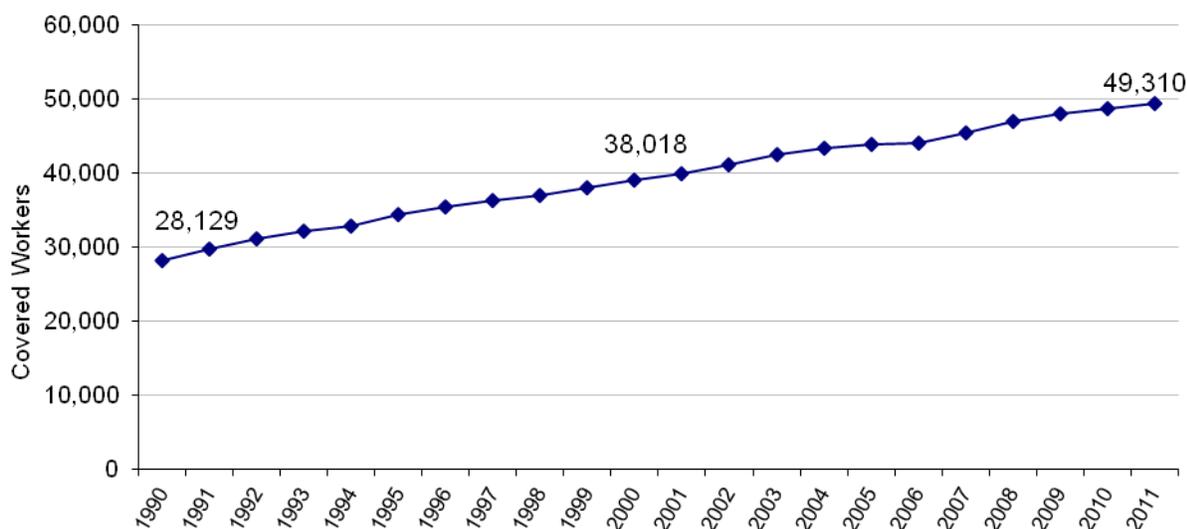
## Employment in South Dakota's Healthcare Industry

South Dakota's healthcare industry has experienced substantial and steady growth since 1972 when record keeping began. Growth of the healthcare industry is projected to continue for the foreseeable future and is projected to be one of South Dakota's largest growth industries over the next decade. The industry's demand for workers is driven in part by:

- an aging patient population;
- an expanding general population;
- technological advances in the workplace requiring additional staff;
- a growing emphasis on disease management; and
- an aging healthcare workforce who must be replaced as they retire.

The number of workers (covered by unemployment insurance) in South Dakota's healthcare industry increased by 75.3 percent from 1990 to 2011, as shown in Figure 1 below.

**Figure 1:** Growth in Number of Healthcare Covered Workers from 1990 to 2011



*Source:* South Dakota Department of Labor and Regulation, Labor Market Information Center [Covered workers includes Ambulatory Health Care Services, Hospitals and Nursing/Residential Care Facilities]

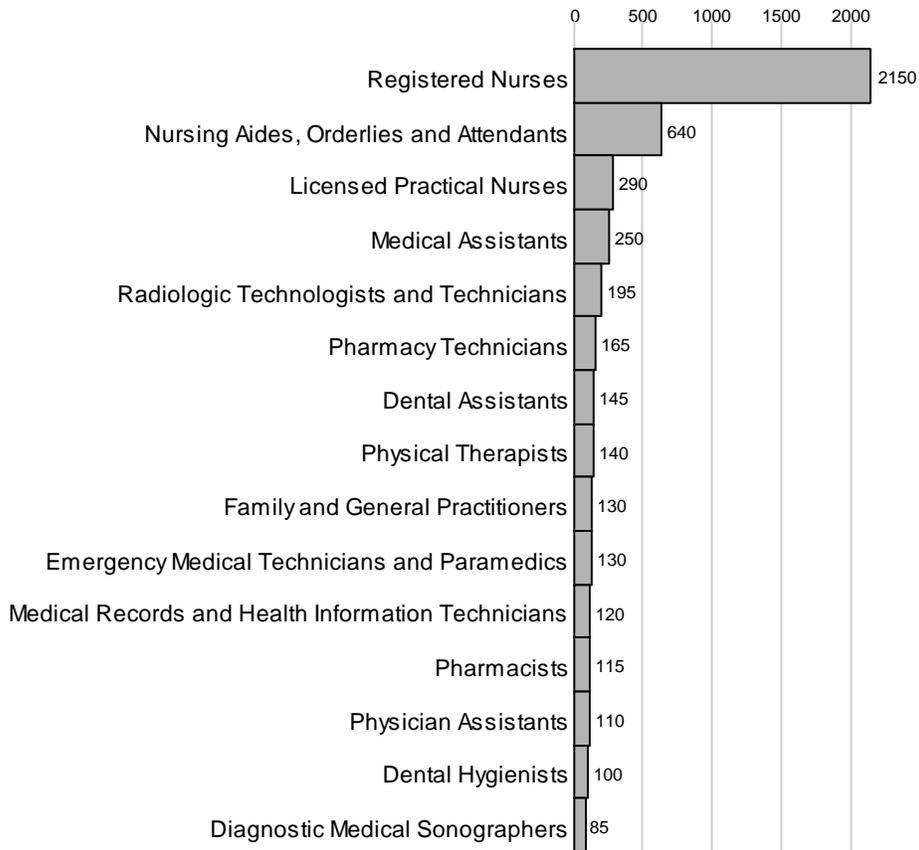
Healthcare occupations that provide direct health care services are among the fastest growing professions in South Dakota and are projected to make up approximately 14% of the state's projected new jobs between 2010 and 2020.

There are many ways to analyze the demand for an occupation. Characteristics of demand include how fast an occupation is projected to grow, how many total job openings are projected through industry growth and the need to replace retiring workers. All of these factors can help evaluate whether an occupation is expected to encounter shortages, but no factor tells the entire story alone.

The South Dakota Department of Labor and Regulation (see Table 1) projections of health occupation needs in the future are consistent with the needs of an aging population.

Figure 2 summarizes fifteen healthcare occupations projected to have the highest change in number of new workers by 2020.

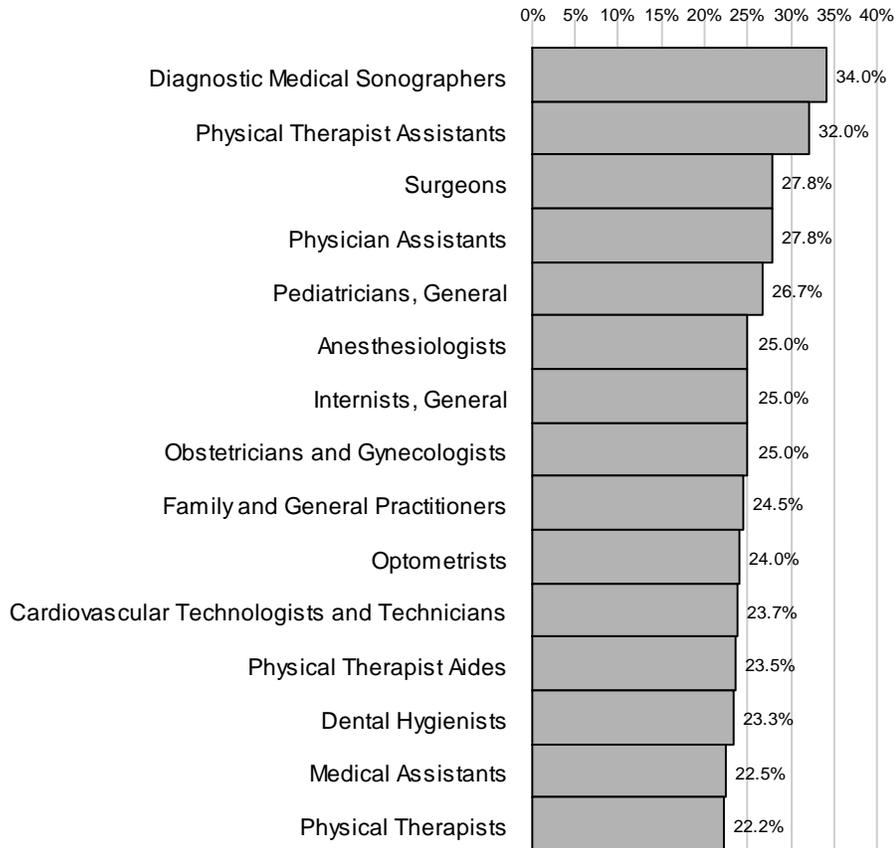
**Figure 2:** South Dakota Employment Projections 2010-2020 for Health Care Occupations  
Top 15: Actual Change



Source: Labor Market Information Center, South Dakota Department of Labor and Regulation, May 2013.

In addition to actual change in number of positions, percent change in number of positions is also a helpful metric to identify emerging occupations which are projected to see growth in the future. A review of the top fifteen occupations to see the largest percent change in positions from 2010 to 2020 indicates a growth in many of the technical support occupations (Figure 3). Readers are encouraged to look at the percent change along with the projected actual change in positions to obtain a true sense of occupation needs in the future. See Table 1 and Figures 4 and 5 for a comparison of all the health professions for which projection data was available from the South Dakota Department of Labor and Regulation.

**Figure 3:** South Dakota Employment Projections 2010-2020 for Health Care Occupations  
Top 15: Percent Change



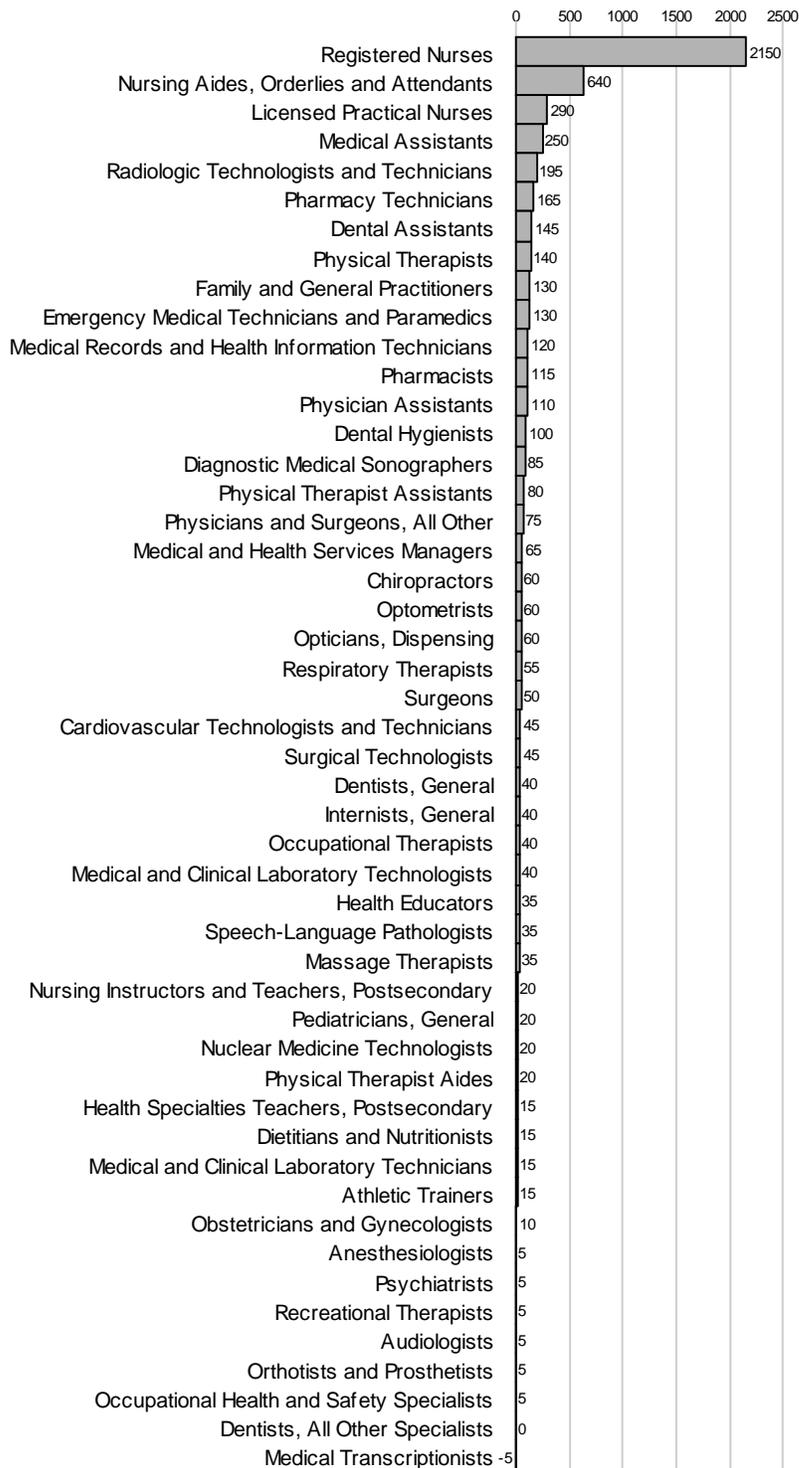
Source: Labor Market Information Center, South Dakota Department of Labor and Regulation, May 2013.

**Table 1: South Dakota Employment Projections 2010 - 2020 for Healthcare Occupations**

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Anesthesiologists	20	25	5	25.0%	1
Athletic Trainers	100	115	15	15.0%	5
Audiologists	25	30	5	20.0%	1
Cardiovascular Technologists and Technicians	190	235	45	23.7%	8
Chiropractors	300	360	60	20.0%	12
Dental Assistants	875	1,020	145	16.6%	33
Dental Hygienists	430	530	100	23.3%	19
Dentists, All Other Specialists	35	35	0	0.0%	1
Dentists, General	415	455	40	9.6%	16
Diagnostic Medical Sonographers	250	335	85	34.0%	13
Dietitians and Nutritionists	170	185	15	8.8%	8
Emergency Medical Technicians and Paramedics	850	980	130	15.3%	30
Family and General Practitioners	530	660	130	24.5%	24
Health Educators	165	200	35	21.2%	7
Health Specialties Teachers, Postsecondary	160	175	15	9.4%	4
Internists, General	160	200	40	25.0%	7
Licensed Practical Nurses	2,035	2,325	290	14.3%	83
Massage Therapists	175	210	35	20.0%	6
Medical and Clinical Laboratory Technicians	355	370	15	4.2%	8
Medical and Clinical Laboratory Technologists	790	830	40	5.1%	19
Medical and Health Services Managers	600	665	65	10.8%	21
Medical Assistants	1,110	1,360	250	22.5%	42
Medical Records and Health Information Technicians	975	1,095	120	12.3%	32
Medical Transcriptionists	795	790	-5	-0.6%	12
Nuclear Medicine Technologists	145	165	20	13.8%	4
Nursing Aides, Orderlies and Attendants	6,265	6,905	640	10.2%	145
Nursing Instructors and Teachers, Postsecondary	175	195	20	11.4%	5
Obstetricians and Gynecologists	40	50	10	25.0%	2
Occupational Health and Safety Specialists	140	145	5	3.6%	6
Occupational Therapists	300	340	40	13.3%	10
Opticians, Dispensing	400	460	60	15.0%	14
Optometrists	250	310	60	24.0%	15
Orthotists and Prosthetists	40	45	5	12.5%	1
Pediatricians, General	75	95	20	26.7%	3
Pharmacists	915	1,030	115	12.6%	35
Pharmacy Technicians	1,060	1,225	165	15.6%	35
Physical Therapist Aides	85	105	20	23.5%	3
Physical Therapist Assistants	250	330	80	32.0%	12
Physical Therapists	630	770	140	22.2%	21
Physician Assistants	395	505	110	27.8%	18
Physicians and Surgeons, All Other	440	515	75	17.0%	16
Psychiatrists	35	40	5	14.3%	1
Radiologic Technologists and Technicians	915	1,110	195	21.3%	34
Recreational Therapists	40	45	5	12.5%	2
Registered Nurses	11,060	13,210	2,150	19.4%	415
Respiratory Therapists	295	350	55	18.6%	11
Speech-Language Pathologists	350	385	35	10.0%	10
Surgeons	180	230	50	27.8%	9
Surgical Technologists	435	480	45	10.3%	12

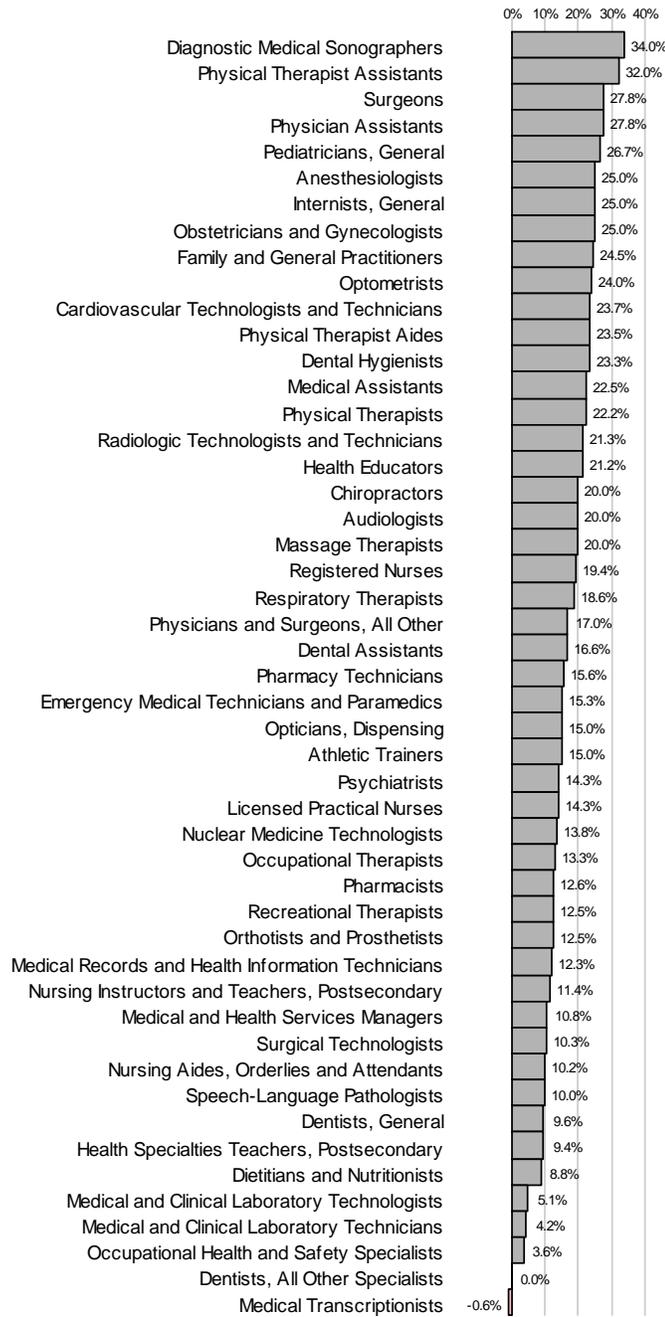
Source: Labor Market Information Center, South Dakota Department of Labor and Regulation, May 2013

**Figure 4: South Dakota Employment Projections 2010-2020 for Health Care Occupations Actual Change (From Table 1)**



Source: Labor Market Information Center, South Dakota Department of Labor and Regulation, May 2013.

**Figure 5: South Dakota Employment Projections 2010-2020 for Health Care Occupations Percent Change**



Source: Labor Market Information Center, South Dakota Department of Labor and Regulation, May 2013.

**Notes Related to South Dakota Department of Labor and Regulation Employment Projections Data:** Data for occupations with less than 20 jobs in 2010 is not included. Data presented for occupations will not sum to totals due to data for additional occupations and non-publishable data for additional occupations being included in totals. Demand data is the summation of job openings estimated due to projected employment growth (for those occupations for which the 2010-2020 actual change is positive) and job openings projected to be created due to replacement need of current workers. Replacement need is estimated by multiplying occupational employment estimates by national replacement rates supplied by the U.S. Bureau of Labor Statistics (BLS). These rates estimate the number of job openings, by occupation, which will be attributed to a worker permanently leaving an occupation (e.g. retirement, death, exits the workforce, etc.). Average annual demand data are calculated by dividing by ten, the number of years in the projection period. For more information, see [http://dol.sd.gov/lmic/projections\\_methodology.aspx](http://dol.sd.gov/lmic/projections_methodology.aspx).

## Educational Supply

Many of the healthcare occupations included in this report require some level of postsecondary education. Training programs exist in South Dakota for many of the major occupations. Data on program completers summarized in Table 2 was drawn from the South Dakota Board of Regents and Table 3 from the National Center for Educational Statistics' Integrated Postsecondary Education Data System (IPEDS) for private universities, tribal colleges and universities, and postsecondary technical institutes.

**Table 2:** Selected Health Care Occupations – Degrees Conferred by Public Universities, by year.

Major Description	Univ.	Degree	2008	2009	2010	2011	2012	5-Year Total	5-Year Average
Athletic Training	SDSU	B	14	14	12	15	12	67	13.4
	SDSU	M	0	0	0	4	4	8	1.6
Audiology	USD	AuD	1	3	3	5	2	14	2.8
Dental Hygiene	USD	A	31	32	30	30	31	154	30.8
	USD	B	33	32	38	27	32	162	32.4
Dietetics specialization	SDSU	B	16	7	14	25	18	80	16
	SDSU	M	0	0	0	0	2	2	0.4
Health Information Technology	DSU	A	8	8	8	8	19	51	10.2
Health Information Administrator	DSU	B	4	6	5	7	11	33	6.6
Medical Lab Science Medical Technology Clinical Laboratory Science	NSU	B	1	0	0	0	4	5	1
	SDSU	B	13	10	8	10	10	51	10.2
	USD	B	16	18	16	19	22	91	18.2
Medicine (MD)	USD	MD	53	47	46	51	51	248	49.6
<b><u>Nursing</u></b>									
AS Nursing	USD	A	250	271	272	278	243	1314	262.8
Nursing RN Upward Mobility	SDSU	B	55	65	56	57	79	312	62.4
BS Nursing	SDSU	B	229	246	229	230	259	1193	238.6
MS Nursing, Family Nurse Practitioner	SDSU	M	20	18	32	17	38	125	25
MS Nursing, Neonatal Nurse Practitioner	SDSU	M	0	2	1	2	0	5	1
MS Nursing, Psychiatric Nurse Practitioner	SDSU	M	1	2	0	3	0	6	1.2
MS Nursing, Nursing Administrator	SDSU	M	1	3	6	2	2	14	2.8
MS Nursing, Nursing Educator	SDSU	M	5	5	4	6	8	28	5.6
Occupational Therapy	USD	M	11	19	18	22	26	96	19.2
Pharmacy	SDSU	PharmD	62	60	70	66	69	327	65.4
Physical Therapy	USD	M/DPT	21	27	26	25	26	125	25
Physician Assistant	USD	B	0	1	0	0	0	1	0.2
	USD	M	19	19	20	20	21	99	19.8
Respiratory Care Therapy	DSU	A	18	20	13	17	19	87	17.4
	DSU	B	3	3	4	3	2	15	3
Speech-Language Pathology	USD	M	17	15	19	25	34	110	22

**Table 3:** Selected Health Care Occupation Graduates Reported by Private Universities/Other Institutions in South Dakota for the last three Academic Years, as Reported in the National Center for Educational Statistics' Integrated Postsecondary Education Data System (IPEDS).

Discipline Field	Institution	2009	2010	2011	3 Year Total	3 Year Average
Athletic Training	Augustana	8	4	2	14	4.7
	DWU	3	9	3	15	5.0
	NAU-RC	4	6	4	14	4.7
Dental Assistant	Lake Area Tech	42	41	49	132	44.0
Health Information Technology	NAU-SF	0	0	1	1	0.3
Massage Therapy	NAU-SF	9	9	13	31	10.3
	Headlines Academy	26	27	24	77	25.7
	Globe University-SF	0	8	17	25	8.3
Medical/Clinical Assistant	Presentation College	5	6	6	17	5.7
	Colorado Tech	25	0	31	56	18.7
	Lake Area Tech	16	4	21	41	13.7
	Mitchell Tech	9	13	15	37	12.3
	NAU-SF	9	5	15	29	9.7
	Globe University-SF	0	3	11	14	4.7
	West Dakota Tech	0	0	3	3	1.0
Clinical/Medical Laboratory Technician	Lake Area Tech	10	8	7	25	8.3
	Mitchell Tech	10	5	12	27	9.0
Clinical Lab Science/Medical Tech	Mount Marty College	1	0	2	3	1.0
Clinical/Med Lab Science & Allied Professionals, Other	Southeast Tech	16	24	28	68	22.7
	West Dakota Tech	18	20	18	56	18.7
Nursing (LPN)	Lake Area Tech	54	67	64	185	61.7
	Southeast Tech	75	79	96	250	83.3
	West Dakota Tech	21	40	47	108	36.0
	Sinte Gleska	8	8	6	22	7.3
Nursing – Bachelor (RN)	Augustana College	51	56	54	161	53.7
	DWU	5	10	10	25	8.3
	Mount Marty College	19	35	25	79	26.3
	NAU-RC	12	8	15	35	11.7
	NAU-SF	4	1	3	8	2.7
	Presentation College	57	47	56	160	53.3
	U of Sioux Falls	0	0	13	13	4.3
Nursing – Associate (RN)	DWU	60	68	64	192	64.0
	Oglala Lakota	7	7	12	26	8.7
	Presentation College	2	0	11	13	4.3
	Sisseton Wahpeton	9	10	15	34	11.3
Nurse Anesthetist (CRNA)	Mount Marty College	40	41	37	118	39.3
Occupational Therapist Assistants	Lake Area Tech	10	13	17	40	13.3
Pharmacy Technician	NAU-SF	5	8	12	25	8.3
	Southeast Tech	20	25	25	70	23.3
	West Dakota Tech	24	28	32	84	28.0
Physical Therapist Assistants	Lake Area Tech	16	21	17	54	18.0
Radiological Technology/Technician Medical Radiological Technology Science-Radiation Therapist	Presentation College	17	12	8	37	12.3
	Mitchell Tech	17	19	16	52	17.3
	Avera Sacred Heart	6	6	5	17	5.7
	Sanford	13	12	28	53	17.7
	Avera McKennan	12	12	10	34	11.3
	Mount Marty College	9	9	8	26	8.7
	U of Sioux Falls	3	5	10	18	6.0

# Profiles For Individual Occupations

## Data Sources

In addition to employment projection data provided by the South Dakota Department of Labor and Regulation, data from the licensing and certification boards was also obtained. The intent of collecting information from the licensing and certification boards was to expand upon the South Dakota Department of Labor and Regulation data by providing a summation of the current licensed/certified workforce using geographic and age descriptors.

Individual occupational profile descriptions were adapted from The Integrated Postsecondary Education Data System's Classification of Instructional Programs.

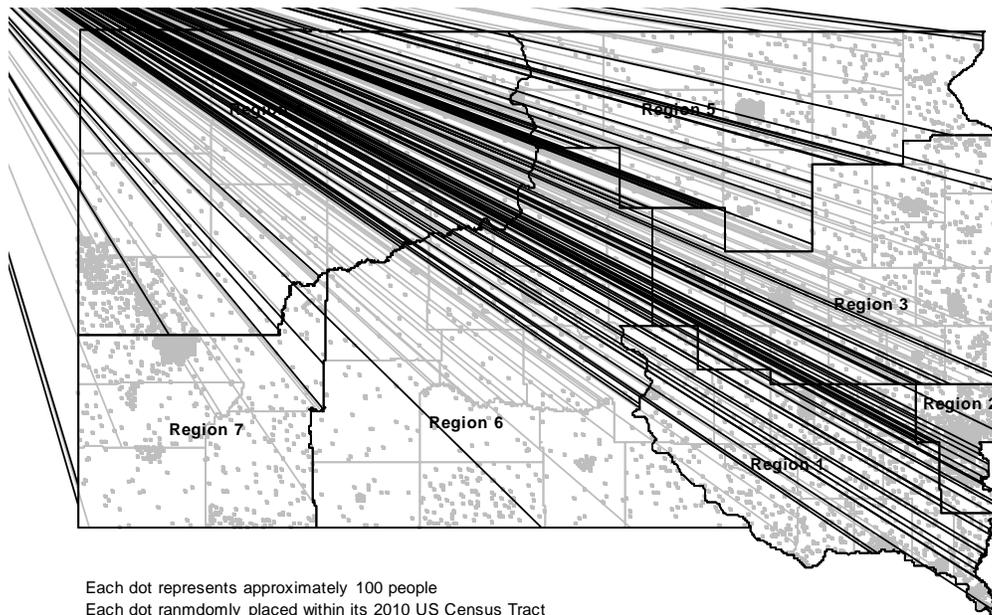
**Table 4:** Professional Licensing Boards and Professions Data Sources

Professional Licensing Board	Professions
South Dakota Board of Chiropractic Examiners	<ul style="list-style-type: none"> <li>• Chiropractors</li> </ul>
South Dakota Board of Dentistry	<ul style="list-style-type: none"> <li>• Dentists</li> <li>• Dental Assistants</li> <li>• Dental Hygienists</li> </ul>
South Dakota Board of Massage Therapy	<ul style="list-style-type: none"> <li>• Massage Therapists</li> </ul>
South Dakota Board of Medical and Osteopathic Examiners	<ul style="list-style-type: none"> <li>• Athletic Trainers</li> <li>• Dietitians and Nutritionists</li> <li>• Emergency Medical Technicians &amp; Paramedics</li> <li>• Medical Assistants</li> <li>• Occupational Therapists</li> <li>• Occupational Therapist Assistants</li> <li>• Physical Therapists</li> <li>• Physical Therapist Assistants</li> <li>• Physicians</li> <li>• Physician Assistants</li> <li>• Respiratory Therapists</li> </ul>
South Dakota Board of Nursing	<ul style="list-style-type: none"> <li>• Certified Nurse Practitioners (CNP)</li> <li>• Licensed Practical Nurses (LPN)</li> <li>• Nurse Anesthetists (CRNA)</li> <li>• Registered Nurses (RN)</li> </ul>
South Dakota Board of Optometry	<ul style="list-style-type: none"> <li>• Optometrists</li> </ul>
South Dakota Board of Pharmacy	<ul style="list-style-type: none"> <li>• Pharmacists</li> </ul>

## Geographic Distribution

The distribution of providers was examined by regions. The map of South Dakota illustrates the population distribution and the seven regions.

Region	Counties
Region 1	Aurora, Brule, Bon Homme, Buffalo, Charles Mix, Clay, Davison, Douglas, Hanson, Hutchinson, McCook, Turner, Union, Yankton
Region 2	Minnehaha, Lincoln
Region 3	Beadle, Brookings, Clark, Codington, Deuel, Grant, Hamlin, Hand, Jerauld, Kingsbury, Lake, Miner, Moody, Sanborn
Region 4	Butte, Corson, Dewey, Harding, Lawrence, Meade, Perkins, Ziebach
Region 5	Brown, Campbell, Day, Edmunds, Faulk, Marshall, McPherson, Roberts, Spink, Walworth
Region 6	Bennett, Gregory, Haakon, Hughes, Hyde, Jackson, Jones, Lyman, Mellette, Potter, Stanley, Sully, Tripp, Todd
Region 7	Custer, Fall River, Pennington, Shannon



## Athletic Trainers

**Description:** A program that prepares individuals to work in consultation with, and under the supervision of physicians to prevent and treat sports injuries and associated conditions. Includes instruction in the identification, evaluation, and treatment of athletic injuries and illnesses; first aid and emergency care; therapeutic exercise; anatomy and physiology; exercise physiology; kinesiology and biomechanics; nutrition; sports psychology; personal and community health; knowledge of various sports and their biomechanical and physiological demands; and applicable professional standards and regulations.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that South Dakota will need an average of 5 new athletic trainers per year.

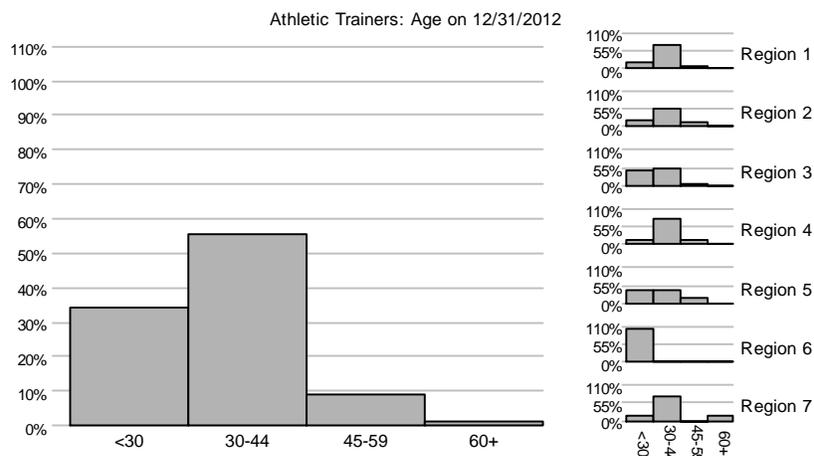
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Athletic Trainers	100	115	15	15.0%	5

**Current Workforce Information:** The statewide median age of Athletic Trainers is 33 years of age and 10.1% of trainers are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	33	35.6	7.6	35	9.1%	0%
2	51	38.0	9.7	36	19.6%	2.0%
3	27	31.9	6.3	30	3.7%	0%
4	9	37.1	8.4	34	11.1%	0%
5	12	33.9	8.8	34.5	16.7%	0%
6	1	26.0	-	26	0%	0%
7	8	39.7	9.6	38.5	12.5%	12.5%
<b>Not SD*</b>	57	29.8	6.8	28	3.5%	0%
<b>Total</b>	198	34.1	8.6	33	10.1%	1.0%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2010-2011 academic year, there were 28 graduates reported from Athletic Trainer programs in South Dakota. During the 2011-2012 academic year, there were 16 graduates reported from Athletic Trainer programs in South Dakota under the Board of Regents schools. Data was not yet available for non-Board of Regents schools for 2012.

## **Audiologists**

**Description:** A program that prepares individuals to diagnose and treat hearing loss and other disorders involving the ear, advise patients on means to use their remaining hearing, and select and fit hearing aids and other devices. Includes instruction in acoustics, anatomy and physiology of hearing, hearing measurement, auditory pathology, middle and inner ear analysis, rehabilitation therapies and assistive technologies, and pediatric and other special applications.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 1 Audiologist per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Audiologists	25	30	5	20.0%	1

**Current Workforce Information:** Information on the current Audiology workforce was not available at time of report completion.

**Supply:** During the 2011-2012 academic year there were 2 graduates reported from Audiology programs in South Dakota.

## Certified Nurse Practitioners (CNP)

**Description:** CNPs are advanced practice registered nurses that work in a variety of settings, such as hospitals and clinics. They are educationally prepared to assess, diagnose and manage patient problems, order tests and prescribe medications. Their advanced education, knowledge, and skills prepare them to care for specific populations of patients, including adults, families, children and infants. South Dakota licenses CNPs in the following population focus areas: Acute, Adult-Gero, Family, Neonatal, Pediatric, Psych-Mental Health, and Women’s Health nurse practitioners.

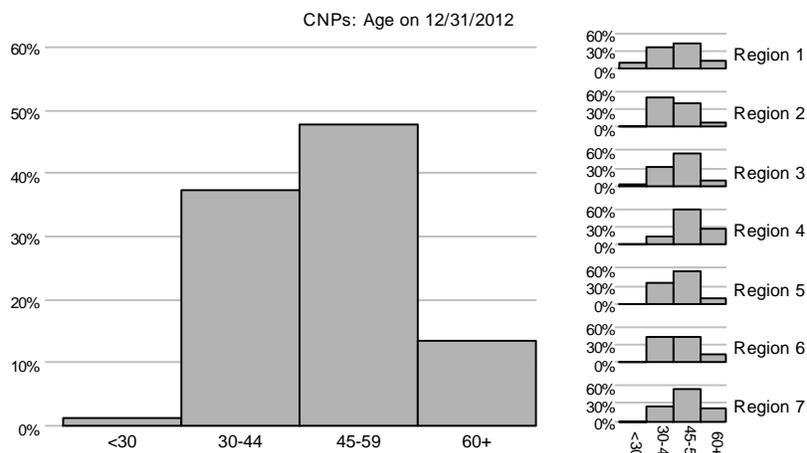
**Demand:** Employment projection data specific for Certified Nurse Practitioners was not included in the South Dakota Department of Labor and Regulation projections.

**Current Workforce Information:** The statewide median age of Certified Nurse Practitioners (CNPs) is 50 years of age and 61.1% of CNPs are age 45 or older. The percent of CNPs age 45 and older is 50% or higher in all seven regions of the state.

### **Current Workforce Distribution by Age and Geographic Region:**

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	40	45.4	11.5	48.0	55.0%	12.5%
2	149	45.0	10.1	44.0	49.7%	9.4%
3	41	49.4	9.5	53.0	65.9%	9.8%
4	27	53.5	8.3	57.0	85.2%	25.9%
5	20	47.9	9.1	50.0	65.0%	10.0%
6	16	48.0	9.5	49.5	56.2%	12.5%
7	76	52.6	9.3	55.0	76.3%	21.1%
<b>Not SD*</b>	45	47.8	10.7	49.0	60.0%	13.3%
<b>Total</b>	414	48.0	10.3	50.0	61.1%	13.5%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2011-2012 academic year there were 38 graduates from CNP programs in South Dakota (includes Family Nurse Practitioners (38), Neonatal Nurse Practitioners (0), and Psych-Mental Health Nurse Practitioners (0)). For more information on the nursing workforce please refer to:

- South Dakota Center for Nursing Workforce, South Dakota Nursing Workforce Supply and Employment Characteristics: 2013.
- South Dakota Board of Nursing, South Dakota Annual Report of Nursing Education Programs: 2012.

Both reports can be found at: <http://doh.sd.gov/Boards/Nursing/RandP.aspx>

## Chiropractors

**Description:** A program that prepares individuals for the independent professional practice of chiropractic, a health care and healing system based on the application of non-invasive treatments and spinal adjustments to alleviate health problems caused by vertebral misalignments affecting bodily function as derived from the philosophy of Daniel Palmer. Includes instruction in the basic medical sciences, chiropractic theory and science, postural and spinal analysis, diagnostic radiology and ultrasound, adjustment technique, patient counseling, professional standards and ethics, and practice management.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 12 new Chiropractors per year.

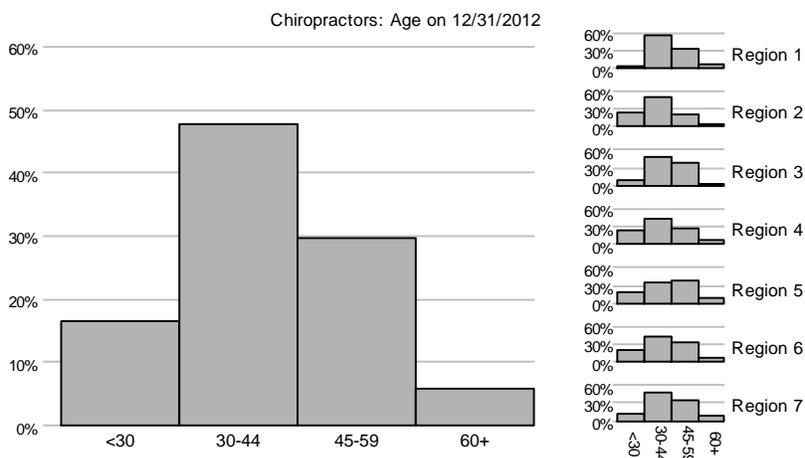
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Chiropractors	300	360	60	20.0%	12

**Current Workforce Information:** The statewide median age of Chiropractors is 38 years of age and 35.7% of Chiropractors are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	64	42.8	10.4	40.0	39.1%	7.8%
2	128	38.1	12.0	35.0	25.0%	5.5%
3	56	41.7	10.4	40.0	41.1%	1.8%
4	27	39.8	12.5	35.0	33.3%	7.4%
5	30	42.9	12.9	43.0	46.7%	10.0%
6	19	40.9	12.5	39.0	36.8%	5.3%
7	52	43.4	12.4	41.0	42.3%	7.7%
Not SD*	13	43.5	11.1	46.0	53.8%	0%
<b>Total</b>	<b>389</b>	<b>40.9</b>	<b>11.8</b>	<b>38.0</b>	<b>35.7%</b>	<b>5.9%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** There are currently no Chiropractic education programs in South Dakota.

## Dental Assistants

**Description:** A program that prepares individuals to provide patient care, take dental radiographs (x-ray photographs), prepare patients and equipment for dental procedures, and discharge office administrative functions under the supervision of dentists and dental hygienists. Includes instruction in medical record-keeping, general office duties, reception and patient intake, scheduling, equipment maintenance and sterilization, basic radiography, pre- and post-operative patient care and instruction, chairside assisting, taking tooth and mouth impressions, and supervised practice.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 33 new Dental Assistants per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Dental Assistants	875	1020	145	16.6%	33

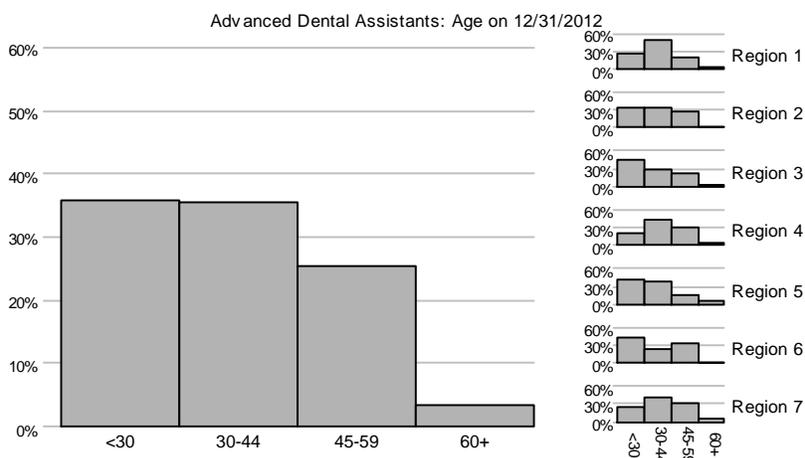
\* The Department of Labor statistics does not distinguish between a dental assistants and an advanced dental assistants.

**Current Workforce Information:** The statewide median age of Dental Assistants is 35 years of age. The percent of Dental Assistants age 45 and older is 28.8%.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	73	37.7	11.3	35	23.3%	4.1%
2	257	36.9	12.2	35	31.5%	3.1%
3	133	34.6	11.8	31	24.8%	2.3%
4	47	40.5	10.7	40	34.0%	4.3%
5	43	34.8	12.5	32	20.9%	7.0%
6	37	36.0	13.7	32	32.4%	0.0%
7	129	39.3	11.5	39	34.9%	4.7%
Not SD*	58	32.0	11.0	29	19.0%	3.4%
<b>Total</b>	<b>777</b>	<b>36.7</b>	<b>12.0</b>	<b>35</b>	<b>28.8%</b>	<b>3.5%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota. Data above includes advanced dental assistants only.



**Supply:** During the 2010-2011 academic year, there were 49 graduates reported from Dental Assistant programs in South Dakota.

## Dental Hygienists

**Description:** A program that prepares individuals to clean teeth and apply preventive materials, provide oral health education and treatment counseling to patients, identify oral pathologies and injuries, and manage dental hygiene practices. Includes instruction in dental anatomy, microbiology, and pathology; dental hygiene theory and techniques; cleaning equipment operation and maintenance; dental materials; radiology; patient education and counseling; office management; supervised clinical training; and professional standards.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 19 new Dental Hygienists per year.

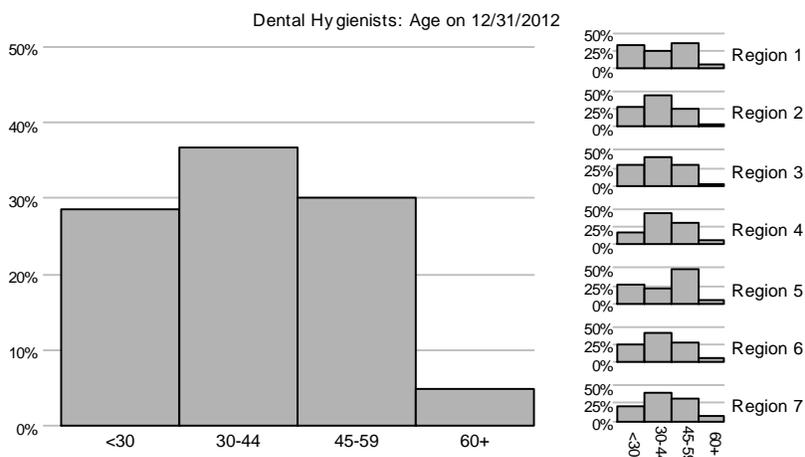
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Dental Hygienists	430	530	100	23.3%	19

**Current Workforce Information:** The statewide median age of Dental Hygienists is 37 years of age and 34.7% of Dental Hygienists are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	105	40.2	13.4	38.0	41.0%	6.7%
2	183	37.9	10.6	35.0	27.9%	2.7%
3	70	38.4	10.8	38.0	30.0%	1.4%
4	41	40.4	11.9	36.0	39.0%	7.3%
5	38	41.1	12.2	45.0	52.6%	5.3%
6	29	40.1	12.1	36.0	34.5%	6.9%
7	96	41.4	12.0	40.5	38.5%	7.3%
<b>Not SD*</b>	129	37.3	12.6	34.0	32.6%	4.7%
<b>Total</b>	691	39.0	11.9	37.0	34.7%	4.8%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2011-2012 academic year, there were 31 associate degree program graduates and 32 baccalaureate degree program graduates reported from the Dental Hygiene programs in South Dakota.

## Dentists

**Description:** A program that prepares individuals for the independent professional practice of dentistry/dental medicine, encompassing the evaluation, diagnosis, prevention, and treatment of diseases, disorders, and conditions of the oral cavity, maxillofacial area, and adjacent structures and their impact on the human body and health. Includes instruction in the basic biomedical sciences, occlusion, dental health and prevention, oral pathology, cariology, operative dentistry, oral radiology, principles of the various dental specialties, pain management, oral medicine, clinic and health care management, patient counseling, and professional standards and ethics.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 16 new Dentists (General) per year and 1 Dentist in a specialty area.

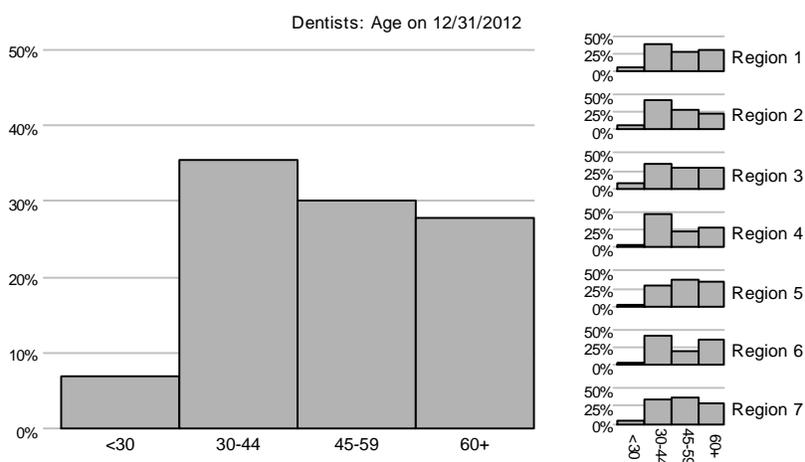
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Dentists, General	415	455	40	9.6%	16
Dentists, All Other Specialists	35	35	0	0.0%	1

**Current Workforce Information:** The statewide median age of Dentists is 50 years of age and 57.9% of Dentists are age 45 or older. The percent of Dentists age 45 and older is greater than 50% in all seven regions of the state.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	58	49.8	13.9	49.5	56.9%	29.3%
2	134	47.2	12.9	47.5	51.5%	23.1%
3	68	50.0	15.0	54.5	58.8%	29.4%
4	26	47.3	13.6	45.5	50.0%	26.9%
5	36	52.4	13.9	54.0	69.4%	33.3%
6	25	49.6	15.4	55.0	56.0%	36.0%
7	94	50.2	12.5	52.5	63.8%	27.7%
<b>Not SD*</b>	91	48.5	15.1	52.0	59.3%	28.6%
<b>Total</b>	532	49.1	13.8	50.0	57.9%	27.8%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** There are currently no Dental programs in South Dakota.

## Dietitians and Nutritionists

### Description:

**Dietitians** A program that prepares individuals to integrate and apply the principles of the food and nutrition sciences, human behavior, and the biomedical sciences to design and manage effective nutrition programs in a variety of settings. Includes instruction in human nutrition; nutrient metabolism; the role of foods and nutrition in health promotion and disease prevention; planning and directing food service activities; diet and nutrition analysis and planning; supervision of food storage and preparation; client education; and professional standards and regulations.

**Nutritionists** A program that focuses on the relationships between food consumption and human development and health. Includes instruction in the cellular and molecular processes of food processing in the human body, related metabolic processes, the relationship of food and nutrition to disease, and nutritional needs across the life span.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 8 new Dietitians and Nutritionists per year.

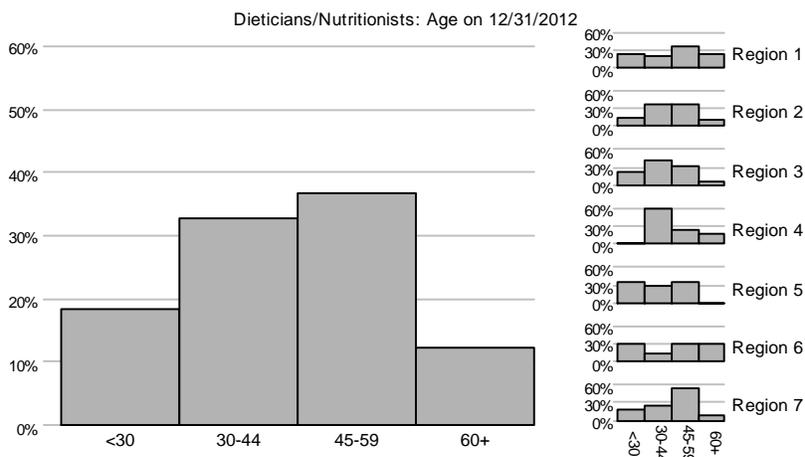
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Dietitians and Nutritionists	170	185	15	8.8%	8

**Current Workforce Information:** The statewide median age of Dietitians and Nutritionists is 43 years of age and 48.8% of Dietitians and Nutritionists are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	22	46.8	15.6	49.0	59.1%	22.7%
2	78	44.8	12.5	43.0	48.7%	11.5%
3	22	40.4	12.0	37.0	36.4%	4.5%
4	12	44.8	12.0	41.5	41.7%	16.7%
5	14	38.0	14.1	34.0	35.7%	0%
6	7	47.3	16.9	56.0	57.1%	28.6%
7	30	44.4	12.0	47.0	60.0%	6.7%
Not SD*	118	43.8	13.2	43.0	48.3%	13.6%
<b>Total</b>	<b>303</b>	<b>44.0</b>	<b>13.1</b>	<b>43.0</b>	<b>48.8%</b>	<b>12.2%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2011-2012 academic year, there were 18 baccalaureate degree program graduates and 2 Master degree program graduates reported from Dietetics and Nutritional programs in South Dakota.

## Emergency Medical Technicians (EMT) and Paramedics

**Description:** A program that prepares individuals, under the remote supervision of physicians, to recognize, assess, and manage medical emergencies in pre-hospital settings and to supervise ambulance personnel. Includes instruction in basic, intermediate, and advanced EMT procedures; emergency surgical procedures; medical triage; rescue operations; crisis scene management and personnel supervision; equipment operation and maintenance; patient stabilization, monitoring, and care; drug administration; identification and preliminary diagnosis of diseases and injuries; communication and computer operations; basic anatomy, physiology, pathology, and toxicology; and professional standards and regulations.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 30 new EMTs and Paramedics per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Emergency Medical Technicians and Paramedics	850	980	130	15.3%	30

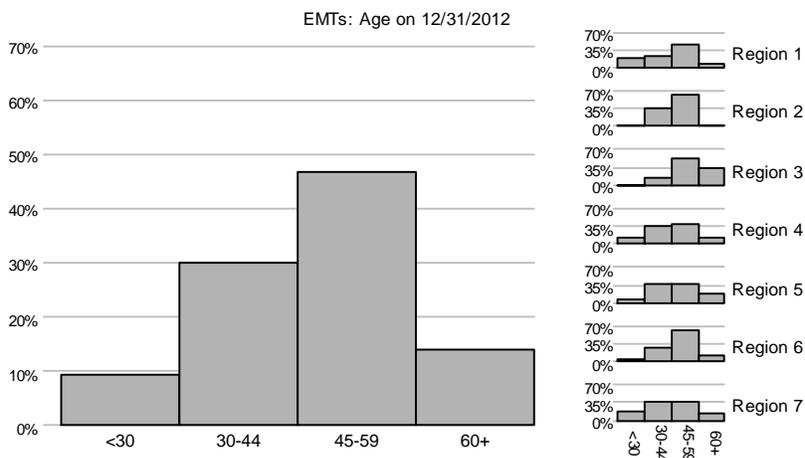
The Workforce and Supply information for Emergency Medical Technician and Paramedics is separated below.

**EMT Current Workforce Information:** The statewide median age of EMTs is 49 years of age and 60.9% of EMTs are age 45 or older. The percent of EMTs age 45 and older is greater or equal to 50% in six out of the seven regions of the state.

### EMT Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	21	45.1	12.5	48.0	57.1%	9.5%
2	8	46.6	7.9	48.5	62.5%	0.0%
3	15	54.3	8.7	54.0	86.7%	33.3%
4	45	44.3	12.3	45.0	51.1%	13.3%
5	21	48.4	12.0	51.0	57.1%	19.0%
6	30	49.5	10.0	50.5	70.0%	10.0%
7	34	44.0	12.6	43.5	47.1%	11.8%
<b>Not SD*</b>	33	50.4	10.5	52.0	72.7%	15.2%
<b>Total</b>	207	47.3	11.7	49.0	60.9%	14.0%

\*Licensure/certification data included individuals with addresses not located in South Dakota.

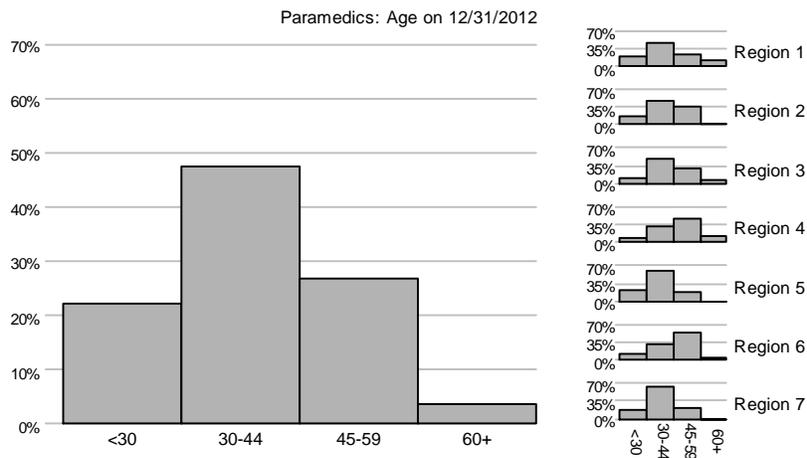


**Paramedics Current Workforce Information:** The statewide median age of Paramedics is 39 years of age and 30.4% of Paramedics are age 45 or older.

**Paramedics Current Workforce Distribution by Age and Geographic Region:**

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	30	39.8	11.3	40.0	33.3%	10.0%
2	94	41.0	9.9	43.0	37.2%	1.1%
3	45	43.4	11.4	43.0	40.0%	8.9%
4	31	46.3	11.4	48.0	58.1%	12.9%
5	48	37.5	9.1	36.0	18.8%	0.0%
6	17	46.7	10.1	47.0	58.8%	5.9%
7	80	37.8	8.5	37.0	21.2%	0.0%
<b>Not SD*</b>	135	35.4	10.6	33.0	21.5%	3.0%
<b>Total</b>	480	39.2	10.7	39.0	30.4%	3.5%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** Training for EMT and Paramedics is provided through hospital and community education programs located throughout the state.

## **Health Information Administrator**

**Description:** A program that prepares individuals to plan, design, and manage systems, processes, and facilities used to collect, store, secure, retrieve, analyze, and transmit medical records and other health information used by clinical professionals and health care organizations. Includes instruction in the principles and basic content of the biomedical and clinical sciences, information technology and applications, data and database management, clinical research methodologies, health information resources and systems, office management, legal requirements, and professional standards.

**Demand:** The South Dakota Department of Labor and Regulation data does not include updated projections specific to Health Information Administrators for the 2010 to 2020 timeframe.

**Current Workforce Information:** Information on the current Health Information Administrator workforce was not available at time of report completion.

**Supply:** During the 2011-2012 academic year there were 11 graduates reported from Health Information Administrator programs in South Dakota.

## Licensed Practical Nurses (LPN)

**Description:** LPNs are individuals that assist in providing general nursing care under the supervision of a registered nurse, physician or dentist. LPNs perform nursing care, treatments, and observations for individuals. LPNs may assist with health counseling and teaching, and administration and delegation of medications.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 83 Licensed Practical Nurses per year.

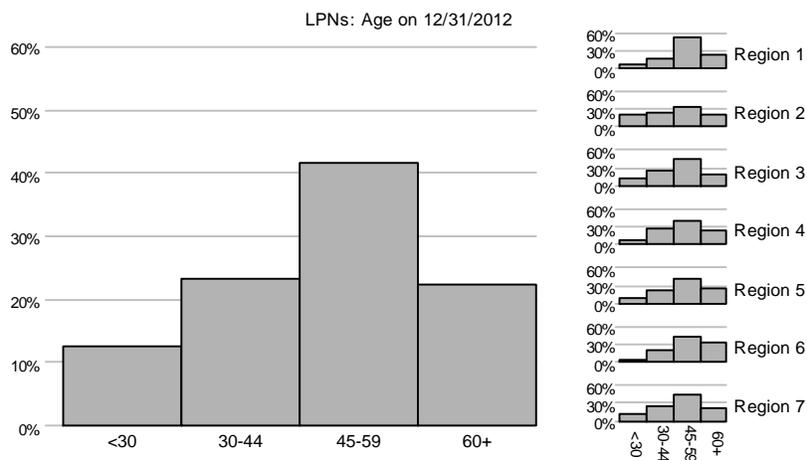
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Licensed Practical Nurses	2035	2325	290	14.3%	83

**Current Workforce Information:** The statewide median age of Licensed Practical Nurses is 51 years of age and 64.1% of Licensed Practical Nurses are age 45 and older. The percent of Licensed Practical Nurses age 45 and older is greater than 55% in all seven regions of the state.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	235	50.7	12.3	53.0	74.9%	23.8%
2	529	46.0	14.1	48.0	55.6%	20.8%
3	289	47.2	13.0	50.0	62.6%	18.7%
4	135	49.8	13.0	52.0	65.9%	25.2%
5	194	50.3	13.1	53.0	68.0%	26.3%
6	101	53.0	12.0	55.0	75.2%	31.7%
7	303	48.3	12.7	51.0	64.7%	21.5%
Not SD*	67	47.6	13.4	50.0	65.7%	19.4%
<b>Total</b>	<b>1853</b>	<b>48.3</b>	<b>13.3</b>	<b>51.0</b>	<b>64.1%</b>	<b>22.4%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2010-2011 academic year, there were 213 individuals who completed Licensed Practical Nurse program. (See Table 3). For more information on the nursing workforce please refer to:

- South Dakota Center for Nursing Workforce, South Dakota Nursing Workforce Supply and Employment Characteristics: 2013.
- South Dakota Board of Nursing, South Dakota Annual Report of Nursing Education Programs: 2012.

Both reports can be found at: <http://doh.sd.gov/Boards/Nursing/RandP.aspx>

## Massage Therapists

**Description:** A program that prepares individuals to provide relief and improved health and well-being to clients through the application of manual techniques for manipulating skin, muscles, and connective tissues. Includes instruction in Western (Swedish) massage, sports massage, myotherapy/trigger point massage, myofascial release, deep tissue massage, cranio-sacral therapy, reflexology, massage safety and emergency management, client counseling, practice management, applicable regulations, and professional standards and ethics.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 6 new Massage Therapists per year.

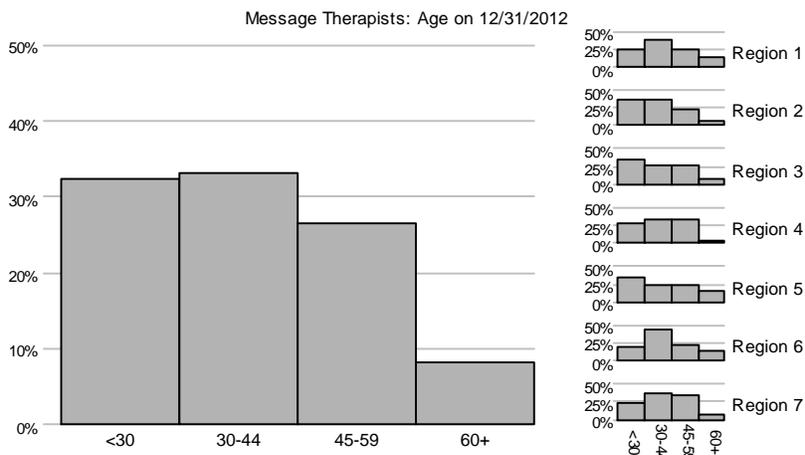
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Massage Therapists	175	210	35	20.0%	6

**Current Workforce Information:** The statewide median age of Massage Therapists is 35 years of age and 34.7% of Massage Therapists are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	84	41.5	14.6	38.0	39.3%	14.3%
2	190	36.8	12.9	32.0	27.9%	5.8%
3	75	38.0	13.6	35.0	36.0%	8.0%
4	66	38.5	12.7	35.5	37.9%	4.5%
5	76	41.2	16.0	37.5	40.8%	15.8%
6	27	42.6	16.5	39.0	37.0%	14.8%
7	145	40.4	13.0	37.0	40.0%	6.2%
<b>Not SD*</b>	96	34.6	13.4	31.0	27.1%	6.2%
<b>Total</b>	<b>759</b>	<b>38.6</b>	<b>13.8</b>	<b>35.0</b>	<b>34.7%</b>	<b>8.3%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2010-2011 academic year, there were 54 graduates reported from Massage Therapy programs in South Dakota.

## Medical and Clinical Laboratory Technicians

**Description:** A program that prepares individuals, under the supervision of clinical laboratory scientists/medical technologists, to perform routine medical laboratory procedures and tests and to apply preset strategies to record and analyze data. Includes instruction in general laboratory procedures and skills; laboratory mathematics; medical computer applications; interpersonal and communications skills; and the basic principles of hematology, medical microbiology, immunohematology, immunology, clinical chemistry, and urinalysis.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 8 new Medical and Clinical Laboratory Technicians per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Medical and Clinical Laboratory Technicians	355	370	15	4.2%	8

**Current Workforce Information:** Information on the age and geographic distribution of the current Clinical/Medical Laboratory Technician workforce is not currently available.

**Supply:** During the 2010-2011 academic year, there were 19 graduates reported from Medical and Clinical Laboratory Technician programs in South Dakota.

## Medical and Clinical Laboratory Technologists

**Description:** A program that prepares individuals to conduct and supervise complex medical tests, clinical trials, and research experiments; manage clinical laboratories; and consult with physicians and clinical researchers on diagnoses, disease causation and spread, and research outcomes. Includes instruction in the theory and practice of hematology, clinical chemistry, microbiology, immunology, immunohematology, physiological relationships to test results, laboratory procedures and quality assurance controls, test and research design and implementation, analytic techniques, laboratory management, data development and reporting, medical informatics, and professional standards and regulations.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 19 new Medical and Clinical Laboratory Technologists per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Medical and Clinical Laboratory Technologists	790	830	40	5.1%	19

**Current Workforce Information:** Information on the age and geographic distribution of the current Medical and Clinical Laboratory Technologists workforce is not currently available.

**Supply:** During the 2010-2011 academic year, there were 31 graduates reported from Medical and Clinical Laboratory Technologist programs in South Dakota. During the 2011-2012 academic year, there were 36 graduates reported from Medical and Clinical Laboratory Technologist programs in South Dakota under the Board of Regents schools. Data was not yet available for non-Board of Regents schools for 2012.

## Medical Assistants

**Description:** A program that prepares individuals, under the supervision of physicians, to provide medical office administrative services and perform clinical duties including patient intake and care, routine diagnostic and recording procedures, pre-examination and examination assistance, and the administration of medications and first aid. Includes instruction in basic anatomy and physiology; medical terminology; medical law and ethics; patient psychology and communications; medical office procedures; and clinical diagnostic, examination, testing, and treatment procedures.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 42 new Medical Assistants per year.

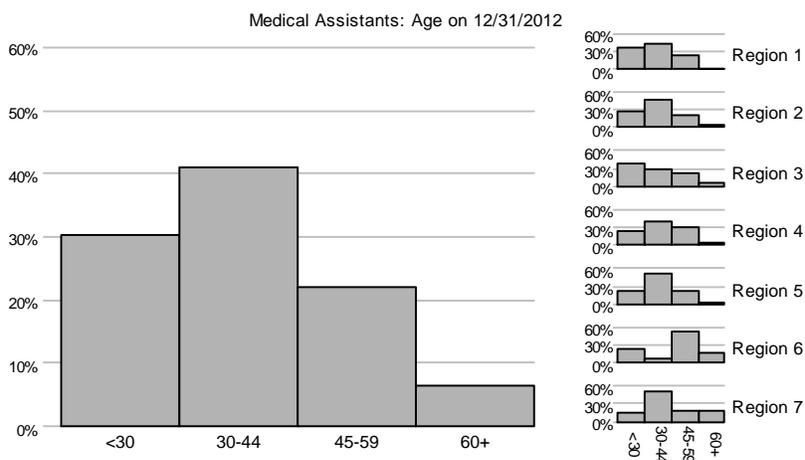
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Medical Assistants	1110	1360	250	22.5%	42

**Current Workforce Information:** The statewide median age of Medical Assistants is 35 years of age and 28.5% of Medical Assistants are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	77	35.3	10.5	33.0	22.1%	0.0%
2	173	37.1	10.8	34.0	24.9%	5.2%
3	66	37.4	13.2	34.0	30.3%	7.6%
4	20	38.6	11.9	33.5	35.0%	5.0%
5	40	38.0	10.8	34.5	25.0%	2.5%
6	13	47.0	14.6	50.0	69.2%	15.4%
7	42	42.9	12.8	38.5	35.7%	19.0%
<b>Not SD*</b>	138	38.4	13.6	34.5	29.7%	7.2%
<b>Total</b>	<b>569</b>	<b>38.0</b>	<b>12.2</b>	<b>35.0</b>	<b>28.5%</b>	<b>6.3%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2010-2011 academic year, there were 102 program completers reported from Medical Assistant programs in the state.

## Medical Records and Health Information Technicians

**Description:** A program that prepares individuals, under the supervision of health information administrators and other professionals, to construct medical records and clinical databases, perform manipulations on retrieved data, control the security and quality of records, and supervise data entry and technical maintenance personnel. Includes instruction in clinical and biomedical science data and information requirements, database management, data coding and validation, information security, quality control, health information content and structure, medical business procedures, and legal requirements.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 32 new Health Information Technicians per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Medical Records and Health Information Technicians	975	1095	120	12.3%	32

**Current Workforce Information:** Information on the age and geographic distribution of the current Health Information Technician workforce is not currently available.

**Supply:** During the 2010-2011 academic year, there were 9 graduates reported from Health Information Technology programs in South Dakota. During the 2011-2012 academic year, there were 19 graduates reported from Health Information Technology programs in South Dakota under the Board of Regents schools. Data was not yet available for non-Board of Regents schools for 2012.

## Nurse Anesthetists (CRNA)

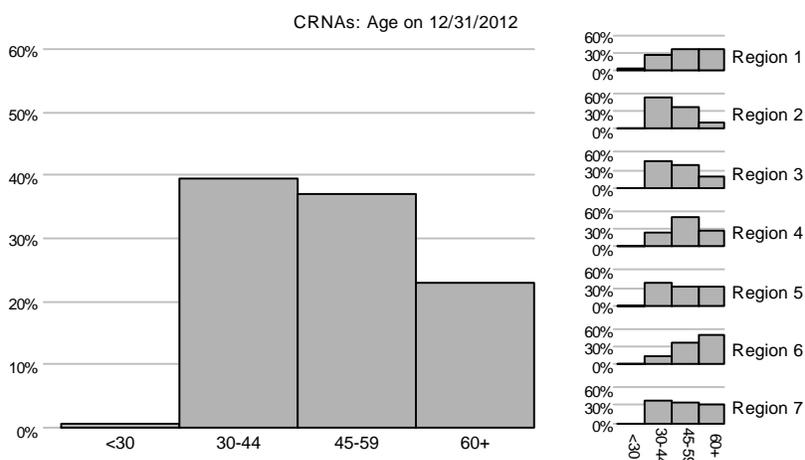
**Description:** CRNAs are advanced practice registered nurses that work in hospital operating rooms and out-patient surgical settings. Their advanced education in pharmacology, assessment, and pathophysiology prepares them to manage patients before, during and after anesthesia including assessing and administering anesthetic medications, managing pain, and intervening in emergency patient situations.

**Demand:** The South Dakota Department of Labor and Regulation data does not include projections specific to Certified Registered Nurse Anesthetists.

**Current Workforce Information:** The statewide median age of CRNAs is 49 years of age and 59.9% of CRNAs are age 45 or older. The percent of CRNAs age 45 and older is greater than 50% in six out of the seven regions of the state.

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	44	52.3	12.5	56.0	72.7%	36.4%
2	134	45.8	10.0	43.5	46.3%	9.7%
3	16	48.4	10.7	50.0	56.2%	18.8%
4	18	51.4	11.4	52.5	77.8%	27.8%
5	19	53.0	13.4	53.0	63.2%	31.6%
6	8	55.4	12.4	60.0	87.5%	50.0%
7	52	50.8	10.9	48.5	63.5%	30.8%
<b>Not SD*</b>	51	52.3	10.8	53.0	70.6%	29.4%
<b>Total</b>	<b>342</b>	<b>49.4</b>	<b>11.3</b>	<b>49.0</b>	<b>59.9%</b>	<b>22.8%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2010-2011 academic year, there were 37 graduates from the CRNA program in South Dakota. For more information on the nursing workforce please refer to:

- South Dakota Center for Nursing Workforce, South Dakota Nursing Workforce Supply and Employment Characteristics: 2013.
- South Dakota Board of Nursing, South Dakota Annual Report of Nursing Education Programs: 2012.

Both reports can be found at: <http://doh.sd.gov/Boards/Nursing/RandP.aspx>

## Occupational Therapists

**Description:** A program that prepares individuals to assist patients limited by physical, cognitive, psychosocial, mental, developmental, and learning disabilities, as well as adverse environmental conditions, to maximize their independence and maintain optimum health through a planned mix of acquired skills, performance motivation, environmental adaptations, assistive technologies, and physical agents. Includes instruction in the basic medical sciences, psychology, sociology, patient assessment and evaluation, standardized and non-standardized tests and measurements, assistive and rehabilitative technologies, ergonomics, environmental health, special education, vocational counseling, health education and promotion, and professional standards and ethics.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 10 Occupational Therapists per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Occupational Therapists	300	340	40	13.3%	10

**Current Workforce Information:** The statewide median age of Occupational Therapists is 39 years of age and 29.7% of Occupational Therapists are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	43	41.2	7.1	41.0	30.2%	2.3%
2	119	40.0	8.3	40.0	29.4%	2.5%
3	29	40.2	10.2	39.0	24.1%	3.4%
4	12	44.0	12.1	41.0	50.0%	16.7%
5	27	41.6	10.6	39.0	33.3%	7.4%
6	10	40.4	10.8	38.5	30.0%	10.0%
7	47	41.0	9.1	40.0	29.8%	2.1%
<b>Not SD*</b>	147	39.2	11.7	37.0	28.6%	8.8%
<b>Total</b>	434	40.2	10.0	39.0	29.7%	5.5%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2011-2012 academic year, there were 26 graduates reported from the Occupational Therapy programs in South Dakota.

## Occupational Therapist Assistants

**Description:** A program that prepares individuals, under the supervision of occupational therapists, to direct patient participation in skill-enhancing, learning, and motivational tasks; correct or diminish pathologies; and to provide direct health education and promotion services. Includes instruction in human life span development, occupational therapy principles and practice skills, treatment planning and implementation, record-keeping and documentation, patient education and intervention, activity and program direction, and assistive services management.

**Demand:** The South Dakota Department of Labor and Regulation data does not include projections specific to Occupational Therapist Assistants.

**Current Workforce Information:** The statewide median age of Occupational Therapist Assistants is 33 years of age and 22.9% of Occupational Therapist Assistants are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	17	37.9	9.9	36.0	23.5%	0%
2	20	37.9	9.9	39.5	25.0%	0%
3	23	34.9	11.1	33.0	17.4%	0%
4	2	38.0	15.6	38.0	50.0%	0%
5	22	33.7	13.2	28.0	22.7%	4.5%
6	7	29.1	4.1	29.0	0.0%	0%
7	13	38.2	12.3	39.0	23.1%	0%
<b>Not SD*</b>	40	35.9	12.6	33.0	27.5%	0%
<b>Total</b>	144	35.8	11.5	33.0	22.9%	.7%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2010-2011 academic year, there were 17 graduates reported from Occupational Therapist Assistants programs in South Dakota.

## Optometrists

**Description:** A program that prepares individuals for the independent professional practice of optometry and that focuses on the principles and techniques for examining, diagnosing and treating conditions of the visual system. Includes instruction in prescribing glasses and contact lenses, other optical aids, corrective therapies, patient counseling, physician referral, practice management, and ethics and professional standards.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 15 new Optometrists per year.

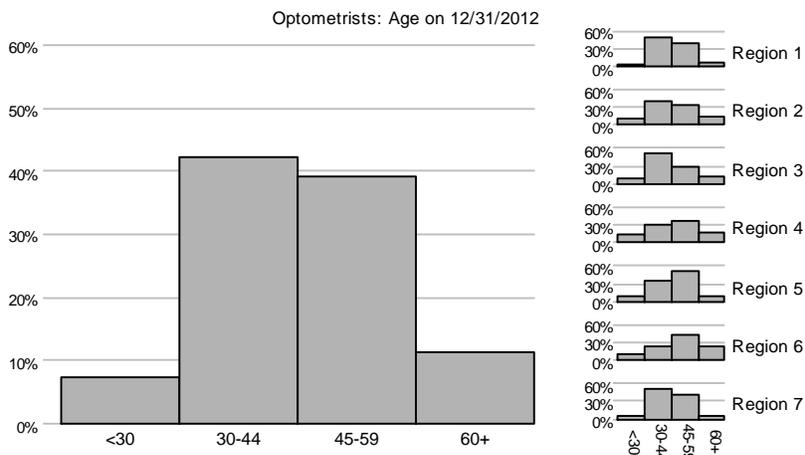
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Optometrists	250	310	60	24.0%	15

**Current Workforce Information:** The statewide median age of Optometrists is 45 years of age and 50.2% of Optometrists are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	28	44.6	10.5	42.5	46.4%	7.1%
2	57	44.2	12.2	44.0	49.1%	15.8%
3	25	44.6	13.1	40.0	40.0%	12.0%
4	16	46.3	12.9	47.0	56.2%	18.8%
5	12	47.9	11.1	49.0	58.3%	8.3%
6	9	49.6	13.4	55.0	66.7%	22.2%
7	38	44.9	12.0	44.0	44.7%	5.3%
Not SD*	30	45.8	11.5	45.0	60.0%	6.7%
<b>Total</b>	<b>215</b>	<b>45.2</b>	<b>11.9</b>	<b>45.0</b>	<b>50.2%</b>	<b>11.2%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** There are currently no Optometry programs in South Dakota.

## Pharmacists

**Description:** A program that prepares individuals for the independent or employed practice of preparing and dispensing drugs and medications in consultation with prescribing physicians and other health care professionals, and for managing pharmacy practices and counseling patients. Includes instruction in mathematics, physics, chemistry, biochemistry, anatomy, physiology, pharmacology, pharmaceutical chemistry, pharmacognosy, pharmacy practice, pharmacy administration, applicable regulations, and professional standards and ethics.

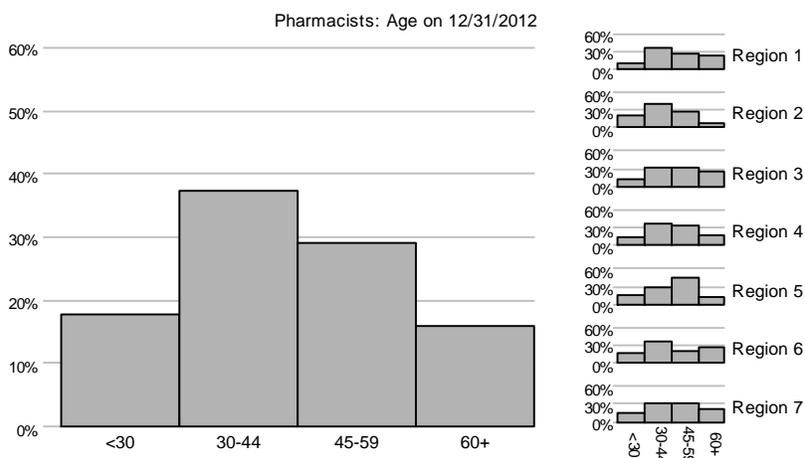
**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 35 new Pharmacists per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Pharmacists	915	1030	115	12.6%	35

**Current Workforce Information:** The statewide median age of Pharmacists is 42 years of age and 44.9% of Pharmacists are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	135	48.0	14.9	47.0	51.9%	24.4%
2	484	40.9	12.4	38.0	35.1%	9.1%
3	127	48.1	13.8	48.0	57.5%	25.2%
4	59	45.0	13.7	43.0	49.2%	16.9%
5	81	47.0	13.3	49.0	56.8%	12.3%
6	52	47.0	16.8	43.0	46.2%	25.0%
7	169	46.0	13.9	45.0	52.7%	20.7%
<b>Not SD</b>	25	39.8	12.4	38.0	28.0%	8.0%
<b>Total</b>	1132	44.2	13.8	42.0	44.9%	15.8%



**Supply:** During the 2011-2012 academic year there were 69 graduates reported from the Pharmacy programs in South Dakota.

## Pharmacy Technicians

**Description:** A program that prepares individuals, under the supervision of pharmacists, to prepare medications, provide medications and related assistance to patients, and manage pharmacy clinical and business operations. Includes instruction in medical and pharmaceutical terminology, principles of pharmacology and pharmaceuticals, drug identification, pharmacy laboratory procedures, prescription interpretation, patient communication and education, safety procedures, record-keeping, measurement and testing techniques, pharmacy business operations, prescription preparation, logistics and dispensing operations, and applicable standards and regulations.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 35 new Pharmacy Technicians per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Pharmacy Technicians	1060	1225	165	15.6%	35

**Current Workforce Information:** Demographic information on the current workforce is not currently available.

**Supply:** During the 2010-2011 academic year there were 69 graduates reported from Pharmacy Technician programs in South Dakota.

## Physical Therapist Assistants

**Description:** A program that prepares individuals, under the supervision of a physical therapist, to implement physical therapy treatment care plans, train patients, conduct treatment interventions, use equipment, and observe and record patient progress. Includes instruction in applied anatomy and physiology, applied kinesiology, principles and procedures of physical therapy, basic neurology and orthopedics, physical therapy modalities, documentation skills, psychosocial aspects of health care, wound and injury care, electrotherapy, working with orthotics and prostheses, and personal and professional ethics.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 12 Physical Therapist Assistants per year.

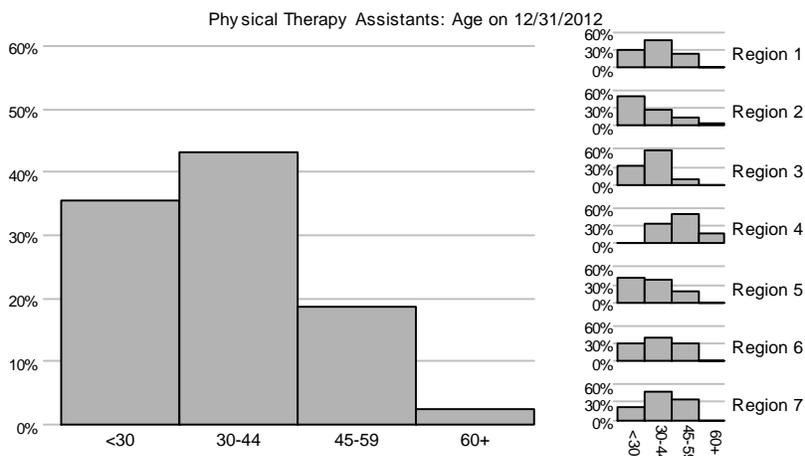
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Physical Therapist Assistants	250	330	80	32.0%	12

**Current Workforce Information:** The statewide median age of Physical Therapist Assistants is 33 years of age and 21.4% of Physical Therapist Assistants are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	33	35.9	11.0	33.0	24.2%	0%
2	25	34.3	11.6	29.0	20.0%	4.0%
3	49	34.3	8.1	34.0	10.2%	0%
4	6	50.2	13.1	52.0	66.7%	16.7%
5	26	33.7	10.7	31.5	19.2%	0%
6	10	37.1	12.4	35.0	30.0%	0%
7	15	38.7	10.8	38.0	33.3%	0%
<b>Not SD*</b>	70	35.8	12.8	32.5	21.4%	5.7%
<b>Total</b>	234	35.7	11.3	33.0	21.4%	2.6%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2010-2011 academic year, there were 17 graduates reported from the Physical Therapy Assistant program in South Dakota.

## Physical Therapists

**Description:** A program that prepares individuals to alleviate physical and functional impairments and limitations caused by injury or disease through the design and implementation of therapeutic interventions to promote fitness and health. Includes instruction in functional anatomy and physiology, kinesiology, neuroscience, pathological physiology, analysis of dysfunction, movement dynamics, physical growth process, management of musculoskeletal disorders, clinical evaluation and measurement, client assessment and supervision, care plan development and documentation, physical therapy modalities, rehabilitation psychology, physical therapy administration, and professional standards and ethics.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 21 Physical Therapists per year.

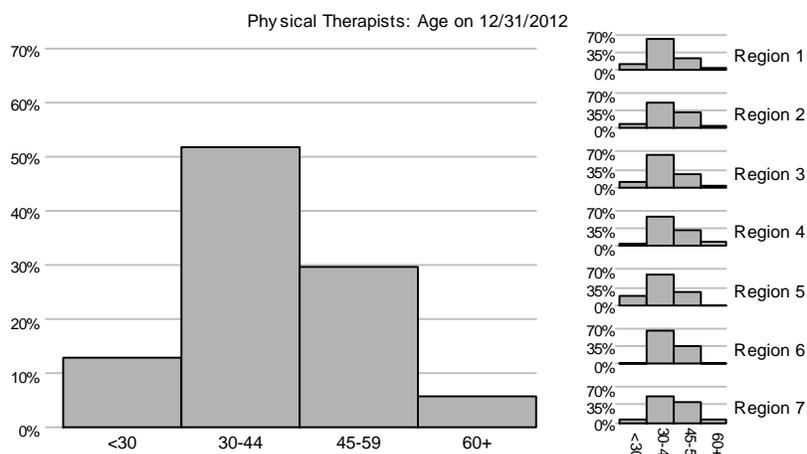
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Physical Therapists	630	770	140	22.2%	21

**Current Workforce Information:** The statewide median age of Physical Therapists is 40 years of age and 35.3% of Physical Therapists are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number of Physical Therapists	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	92	40.1	9.4	39.0	28.3%	5.4%
2	186	42.0	9.8	42.0	37.6%	5.4%
3	63	39.5	7.7	39.0	27.0%	1.6%
4	42	43.6	9.9	43.0	38.1%	7.1%
5	55	38.7	8.5	39.0	23.6%	0.0%
6	18	42.8	7.1	40.0	33.3%	0.0%
7	93	43.3	9.5	44.0	44.1%	5.4%
<b>Not SD*</b>	311	41.1	11.7	40.0	37.0%	8.0%
<b>Total</b>	860	41.3	10.3	40.0	35.3%	5.7%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2011-2012 academic year there were 26 graduates reported from the Physical Therapy program in South Dakota.

## Physician Assistants

**Description:** A program that prepares individuals to practice medicine, including diagnoses and treatment therapies, under the supervision of a physician. Includes instruction in the basic medical and clinical sciences and specialized preparation in fields such as family medicine, pediatrics, obstetrics, gynecology, general surgery, psychiatry, and behavioral medicine; the delivery of health care services to homebound patients, rural populations, and underserved populations; and community health services.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 18 new Physician Assistants per year.

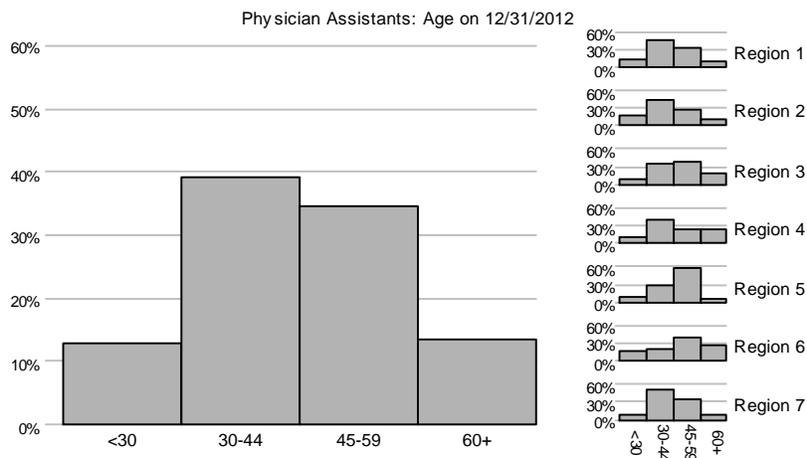
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Physician Assistants	395	505	110	27.8%	18

**Current Workforce Information:** The statewide median age of Physician Assistants is 44 years of age and 47.9% of Physician Assistants are age 45 or older.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	77	43.7	11.4	42.0	41.6%	10.4%
2	136	41.6	11.9	39.5	37.5%	11.0%
3	44	45.8	12.8	46.0	56.8%	18.2%
4	32	47.2	13.2	45.5	50.0%	25.0%
5	44	45.8	10.5	48.0	61.4%	4.5%
6	32	49.6	13.8	52.0	65.6%	25.0%
7	75	43.5	11.4	42.0	44.0%	9.3%
<b>Not SD*</b>	67	45.5	13.4	46.0	56.7%	17.9%
<b>Total</b>	507	44.3	12.3	44.0	47.9%	13.4%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2011-2012 academic year there were 21 graduates reported from the Physician Assistant program in South Dakota.

## Physicians

**Description:** A program that prepares individuals for the independent professional practice of medicine, involving the prevention, diagnosis, and treatment of illnesses, injuries, and other disorders of the human body. Includes instruction in the basic medical sciences, clinical medicine, examination and diagnosis, patient communications, medical ethics and law, professional standards, and rotations in specialties such as internal medicine, surgery, pediatrics, obstetrics and gynecology, orthopedics, neurology, ophthalmology, radiology, clinical pathology, anesthesiology, family medicine, and psychiatry.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 24 Family and General Practitioners and 9 Surgeons per year. See the table below for projections on other Physician/Medical specialties.

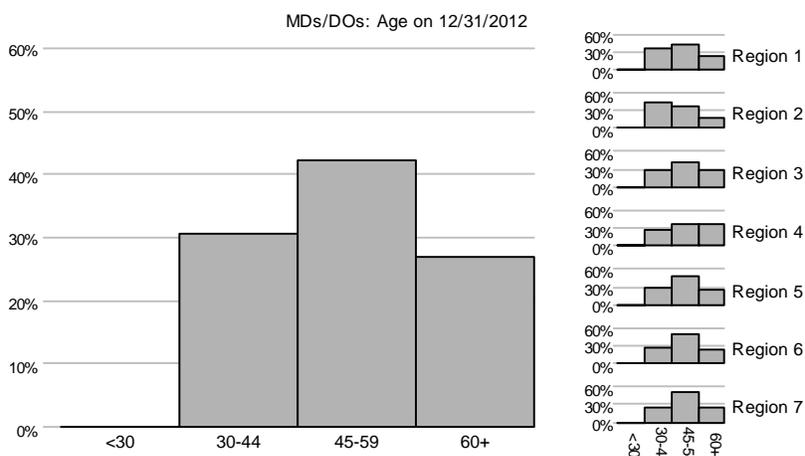
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Anesthesiologists	20	25	5	25.0%	1
Family and General Practitioners	530	660	130	24.5%	24
Internists, General	160	200	40	25.0%	7
Obstetricians and Gynecologists	40	50	10	25.0%	2
Pediatricians, General	75	95	20	26.7%	3
Physicians and Surgeons, All Other	440	515	75	17.0%	16
Psychiatrists	35	40	5	14.3%	1
Surgeons	180	230	50	27.8%	9

**Current Workforce Information:** The statewide median age of Physicians is 52 years of age and 69.3% of Physicians are age 45 or older. The percent of Physicians age 45 and older is greater than 57% in all seven regions of the state.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	252	50.4	11.2	51.5	65.1%	22.6%
2	838	48.5	11.2	47.5	57.4%	19.1%
3	144	51.4	11.9	52.5	70.1%	28.5%
4	77	53.5	11.8	53.0	74.0%	36.4%
5	129	50.7	10.9	51.0	72.9%	25.6%
6	57	52.0	12.1	51.0	73.7%	24.6%
7	342	51.9	10.8	52.0	74.6%	24.3%
Not SD*	1926	53.3	12.2	53.0	73.5%	31.3%
<b>Total</b>	<b>3765</b>	<b>51.8</b>	<b>11.9</b>	<b>52.0</b>	<b>69.3%</b>	<b>27.0%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2011-2012 academic year, there were 51 graduates from the Physician program reported in South Dakota.

## Radiology

### **Description:**

**Radiologic Technologists and Technicians:** A program that prepares individuals, under the supervision of physicians, to provide medical imaging services to patients and attending health care professionals. Includes instruction in applied anatomy and physiology, patient positioning, radiographic technique, radiation biology, safety and emergency procedures, equipment operation and maintenance, quality assurance, patient education, and medical imaging/radiologic services management.

**Medical Radiologic Technology/Science-Radiation Therapist:** A program that prepares individuals to administer prescribed courses of radiation treatment, manage patients undergoing radiation therapy, and maintain pertinent records. Includes instruction in applied anatomy and physiology, oncologic pathology, radiation biology, radiation oncology procedures and techniques, radiation dosimetry, tumor localization, treatment planning, patient communication and management, data collection, record-keeping, and applicable standards and regulations.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 34 new Radiologic Technologists and Technicians per year.

Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Radiologic Technologists and Technicians	915	1110	195	21.3%	34

**Current Workforce Information:** Demographic information on the current workforce is not currently available.

**Supply:** During the 2010-2011 academic year, there were 50 graduates reported from the Radiologic Technology/Science - Radiographer program and an additional 35 graduates from the Medical Radiologic Technology/Science-Radiation Therapist program in South Dakota.

## Registered Nurses (RN)

**Description:** The preparation and practice of RNs requires substantial specialized knowledge, judgment and skill based upon the principles of the biological, physiological, behavioral and sociological sciences, and for which the registered nurse bears responsibility and accountability. RNs perform assessments and nursing diagnoses of actual or potential health problems for individuals or groups, providing and administering preventative, restorative and supportive care, health teaching and counseling, case management and referral. RNs supervise, delegate, and evaluate the care performed by others.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 415 Registered Nurses per year.

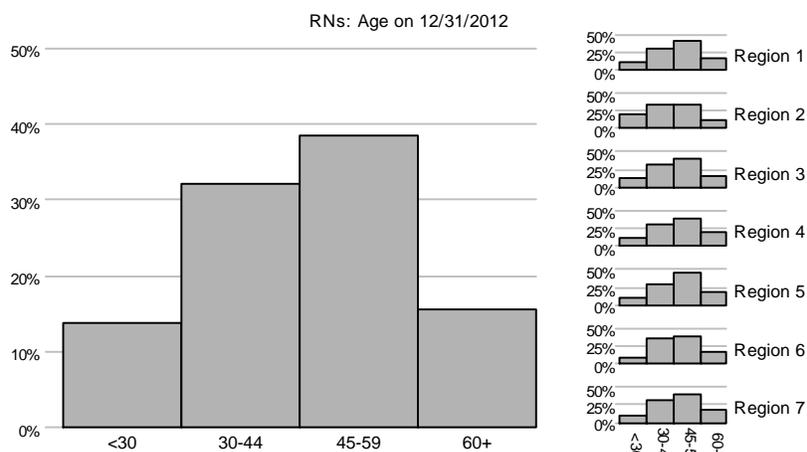
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Registered Nurses	11060	13210	2150	19.4%	415

**Current Workforce Information:** The statewide median age of Registered Nurses is 47 years of age and 54.1% of Registered Nurses are age 45 or older. The percent of Registered Nurses age 45 and older is greater than 50% in six of seven regions of the state.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number of Registered Nurses	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	1655	46.6	12.6	48.0	57.2%	16.5%
2	3876	43.4	13.2	43.0	46.7%	12.8%
3	1193	46.2	12.8	48.0	55.5%	16.3%
4	649	47.2	12.7	49.0	59.2%	19.3%
5	870	47.8	12.6	50.0	62.2%	18.0%
6	500	47.0	12.4	47.0	57.2%	17.6%
7	1633	47.0	12.7	48.0	57.7%	16.9%
<b>Not SD*</b>	868	47.3	12.1	48.0	59.6%	16.5%
<b>Total</b>	11062	45.7	12.9	47.0	54.1%	15.6%

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2010-2011 academic year, there were 851 nursing graduates reported in South Dakota; to include 380 from associate degree programs, 463 from bachelor degree programs, and 8 from master degree programs. During the 2011-2012 academic year, there were 591 nursing program graduates reported under the Board of Regents schools; to include 243 from associate degree programs, 338 from bachelor degree programs, and 10 from master degree programs. Data was not yet available for non-Board of Regents schools for 2012. See Table 2 and Table 3 for a complete breakdown. For more information on the nursing workforce please refer to:

- South Dakota Center for Nursing Workforce, South Dakota Nursing Workforce Supply and Employment Characteristics: 2013.
- South Dakota Board of Nursing, South Dakota Annual Report of Nursing Education Programs: 2012.

Both reports can be found at: <http://doh.sd.gov/Boards/Nursing/RandP.aspx>

## Respiratory Therapists

**Description:** A program that prepares individuals, under the supervision of physicians, to assist in developing respiratory care plans, administer respiratory care procedures, supervise personnel and equipment operation, maintain records, and consult with other health care team members. Includes instruction in the applied basic biomedical sciences; anatomy, physiology, and pathology of the respiratory system; clinical medicine; therapeutic procedures; clinical expressions; data collection and record-keeping; patient communication; equipment operation and maintenance; personnel supervision; and procedures for special population groups.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 11 new Respiratory Therapists per year.

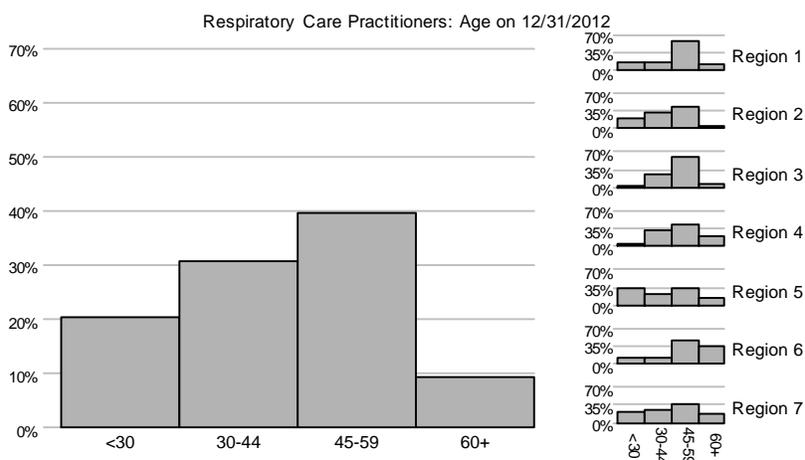
Occupational Title	2010 Workers	2020 Workers	Numeric Change	Percent Change	Average Annual Openings
Respiratory Therapists	295	350	55	18.6%	11

**Current Workforce Information:** The statewide median age of Respiratory Therapists is 44 years of age and 48.7% of Respiratory Therapists are age 45 or older. The percent of Respiratory Therapist age 45 and older is greater than 56% in five of the seven regions.

### Current Workforce Distribution by Age and Geographic Region:

Region	Number of Respiratory Therapists	Mean/Average Age	Standard Deviation	Median	Percent Age 45 and older	Percent Age 60 and older
1	35	47.4	11.5	49.0	68.6%	11.4%
2	178	42.8	11.7	44.0	48.9%	5.6%
3	25	48.7	9.1	51.0	68.0%	8.0%
4	16	46.8	11.6	49.0	62.5%	18.8%
5	32	42.2	14.9	39.0	46.9%	12.5%
6	9	52.9	12.6	55.0	77.8%	33.3%
7	59	44.9	13.7	47.0	55.9%	18.6%
Not SD*	120	38.3	11.7	34.0	31.7%	5.8%
<b>Total</b>	<b>474</b>	<b>42.9</b>	<b>12.5</b>	<b>44.0</b>	<b>48.7%</b>	<b>9.3%</b>

\*Licensure/certification data included individuals with addresses not located in South Dakota.



**Supply:** During the 2011-2012 academic year there were 21 graduates reported from Respiratory Therapy programs in South Dakota.

## **Speech-Language Pathologists**

**Description:** A program that prepares individuals to evaluate the speaking, language interpretation, and related physiological and cognitive capabilities of children and/or adults and develop treatment and rehabilitative solutions in consultation with clinicians and educators. Includes instruction in the anatomy and physiology of speech and hearing, biomechanics of swallowing and vocal articulation, communications disorders, psychology of auditory function and cognitive communication, language assessment and diagnostic techniques, and rehabilitative and management therapies.

**Demand:** Between 2010 and 2020, the South Dakota Department of Labor and Regulation projects that each year South Dakota will need an average of 10 Speech-Language Pathologists per year.

<b>Occupational Title</b>	<b>2010 Workers</b>	<b>2020 Workers</b>	<b>Numeric Change</b>	<b>Percent Change</b>	<b>Average Annual Openings</b>
Speech-Language Pathologists	350	385	35	10.0%	10

**Current Workforce Information:** Information on the current speech-language pathologist workforce was not available at time of report completion.

**Supply:** During the 2011-2012 academic year there were 34 graduates reported from speech-language pathology programs in South Dakota.