

Careers in

HEALTHCARE



Rural Collaborative Opportunities for Occupational Learning in Health (R-COOL-Health)

Center for Rural Health

University of North Dakota School of Medicine & Health Sciences



I'm interested in a career in healthcare...now what?

If you are interested in growing up to be a pharmacist, nurse, or other healthcare professional, this book is a guide to help you along your way!

Before you graduate high school and move on to college and taking courses toward a certain profession, you need to prepare yourself. Healthcareer training programs at both community colleges and four-year universities expect you to meet certain academic prerequisites. This means, if you are interested in a career in healthcare, make sure you take classes in these subject areas during high school:

Math – 2-4 years of math, including geometry and Algebra II

Science – 2-4 years of science, including biology, chemistry, and physics

English – 4 years

Computer Science – 1-2 years

Health Occupations or Medical Professions classes (if your school offers them)

Depending on which area of healthcare you want to focus in, you can visit with your guidance counselor, teachers, or parents to help decide which high school courses are best for you.

If your school offers and health occupations or medical professions classes, take them! These are great ways to learn more about the many, many healthcareers that exist today.

Take the opportunity to job shadow different health professionals. This will give you a better idea of what a certain job is like.

Visit the Center for Rural Health's website: www.ruralhealth.und.edu

Find the 'workforce' page and check out some of the many resources they have to offer. If you have any questions, do not hesitate to contact us and ask!

Degrees and what they mean

Associate's degree – This is a two year degree

Bachelor's degree – This is a four year degree

Master's degree – This is a two year degree you can receive after you have a Bachelor's degree.

Doctoral degree – This is a degree you can earn after you have a Master's degree. The length of time can vary, but typically takes around two years to complete. If a degree says it requires a Doctoral degree but no Master's degree, it means it is probably a four year program.

Medical school – Medical school is the program taken to become a Doctor. This is a four-year program. Learn more about medical school requirements on page 39.

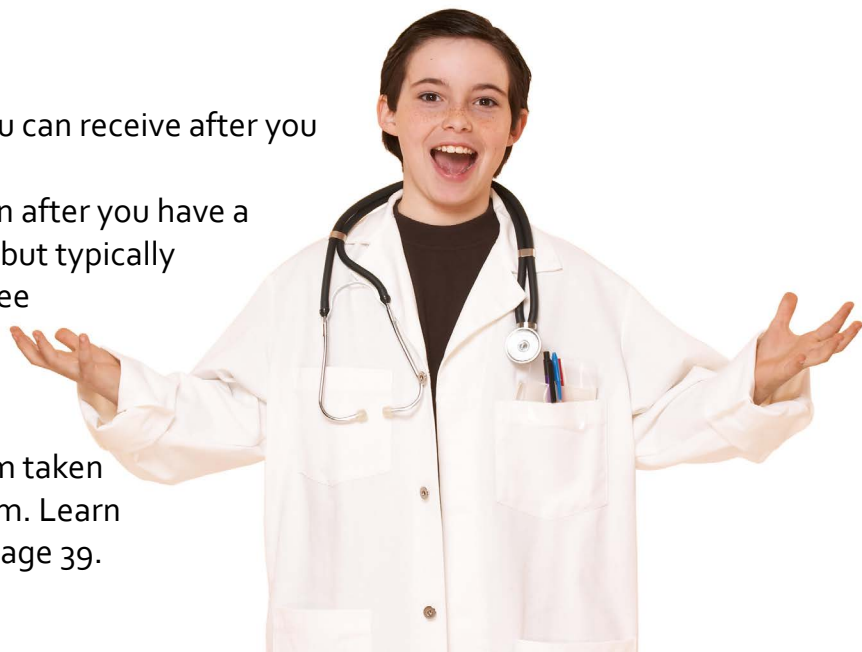


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What is an Athletic Trainer?

- Athletic trainers keep athletes rehabilitated, injury free and able to perform at their highest potential
- Certified athletic trainers assess sports injuries, providing appropriate treatment, and educate athletes on injury-prevention programs as well as healthy lifestyles
- Kinesiology is closely related, focusing on human movement and physical activity
- Athletic trainers tape ankles and such before an athletic practice or game
- Trainers are the first responders for any injury

What education and training do I need?

- High school diploma or equivalent
- Baccalaureate degree programs require four years of study
- Pass the NATABOC's (National Athletic Training Association Board of Certification) test

Years in School: 4

What do Athletic Trainers earn?

The average salary in the United States is \$48,630

Is there a need for Athletic trainers?

The need for athletic trainers will occur mainly in hospitals and other healthcare settings.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND

North Dakota State University | Fargo, ND

University of Mary | Bismarck, ND

Minot State University | Minot, ND

What is an Audiologist?

An Audiologist is an ear doctor. Audiologists help people who have problems with hearing, including problems with balance. Audiologists treat most hearing problems through modern hearing technology like hearing aids. Audiologists also check people for hearing loss, tell them how to prevent hearing loss, and try to catch any problems in people before they have a lot of hearing loss.

Audiology is closely connected to the field of speech-language pathology (SLP). Speech-language pathologists help people with speech, language, and swallowing disorders. Some audiologists also become certified speech-language pathologists, but each profession is different.

What education and training do I need?

- A Bachelor's Degree
- A Doctoral Degree in Audiology
- Pass the licensing exam for the state(s) you want to work in

Years in School: 8

What do Audiologist's earn?

The average salary in the United States is \$80,040 per year.

Is there a need for Audiologists?

Yes, there is a demand for this profession. If you are an Audiologist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

Minot State University | Minot, ND



There are more than 22 million hearing-impaired persons in the U.S.

Every day in the US about 1 in 1,000 babies are born deaf and 2 out of 1,000 are born with partial hearing loss, making hearing loss the number one birth defect in America

What is a Cardiac Sonographer?

- Cardiac Sonographers (AKA echocardiologist) use sound waves (ultrasound) to create images that show the shape and composition of body tissues, organs, and pathologies.
- The Cardiac Sonographer will first record patient history, position the patient for ultrasound testing, and then will explain the procedure in detail.
- Cardiac Sonographers work under the direct supervision of a physician

What education and training do I need?

- High school diploma or equivalent
- Associate degree in applied science
- Apply for certification and registration with the American Registry of Diagnostic Medical Sonographers
- Baccalaureate degree programs in radiologic science are becoming more common and may have “specialization” tracks in diagnostic medical sonography

Years in School: 2

What do Cardiac Sonographer’s earn?

Cardiac Sonographers earn an average of \$ 64,579 per year.

Is there a need for Cardiac Sonographers?

Employment of Cardiac Sonographers is expected to increase by about 22% throughout the 2014-2024 decade. As the population continues to age, there will be an increasing demand for diagnostic imaging.

What is a Cardiovascular Technician?

- Cardiovascular Technologists perform examinations and therapeutic interventions of the heart and/or the blood vessels at the request and direction of the physician.
- There are three different paths to specialize in:
 - o invasive cardiology - Invasive cardiovascular is a practice that involves the technologist helping a doctor insert probes into arteries to look for blockages and clots that inhibit the blood flow to the heart
 - o noninvasive cardiology - Cardiac ultrasound is a practice that involves the use of ultrasound instrumentation to get images of the heart to find diseased and healthy areas
 - o noninvasive peripheral vascular- Vascular ultrasound uses the same equipment, but attempts to find diseased and healthy areas on the blood vessels that provide circulation
- Other duties of a cardiovascular technologist may include reviewing and recording medical history

What education and training do I need?

- High school diploma or equivalent
- Programs may be from 2 to 4 years, depending on student qualifications and number of areas of diagnostic evaluation selected: invasive cardiology, noninvasive cardiology, or noninvasive peripheral vascular study.

Years in School: 2-4

What do Cardiovascular Technician's earn?

Cardiovascular Technologists earn an average of \$ 55,570 per year.

Is there a need for Cardiovascular Technicians?

Job growth is projected to be faster than average for cardiovascular technicians and technologists. Due to the increase of heart disease among older people, much growth will come from the population aging. A decreased demand for invasive techniques due to technological improvements will increase opportunity for echo-cardiographers and vascular technologists.

Are there colleges in North Dakota or nearby that offer this program?

Northland Community & Technical College | East Grand Forks, MN

Rochester Community and Technical College | Rochester, MN

University of Iowa | Iowa City, IA

What is a Child Life Specialist?

- A Child Life Specialist generally works in healthcare focusing on the emotional and developmental needs of children and families
- A Child Life Specialist must assess the psychosocial needs of children and families and provide appropriate therapeutic relationships and activities
- Using play and other forms of communication, they seek to reduce the stress associated with a healthcare experience and enable children and families to cope in a positive manner

What education and training do I need?

- High School Diploma or equivalent
- Bachelor's degree in Child Life or in any related field
- Pass certification exam of Child Life Council (CLC)

Years in School: 4-5

What do Child Life Specialists earn?

Child Life Specialists earn on average of \$50,952 per year.

Is there a need for Child Life Specialists?

The number of child life jobs continues to rise. Virtually every child's hospital across North America has child life staff.

What is a Chiropractor?

- Chiropractors use natural, nonsurgical health treatments such as heat, ultrasound, massage, light, diet, water, exercise, and rest to treat patient's overall health and well-being.
- Postural and spinal analysis, involving correct alignment of the vertebrae, is unique to chiropractors.
- Chiropractors may choose to work with specific age groups, such as children, the elderly or specific areas of interest: sports injuries, orthopedics, neurology, nutrition, and diagnostic x-rays

What education and training do I need?

- Depending on the state, Two years of undergraduate study a number of states require chiropractors to have a four-year bachelor's degree
- Complete a 4-year chiropractic college course
- Pass a test by National Board of Chiropractic Examiners
- To maintain their license, chiropractors must complete continuing education each year

Years in School: 6-8

What do Chiropractors earn?

Chiropractors earn an average of \$144,902 per year.

Is there a need for Chiropractors?

Employment of chiropractors is expected to grow faster than average as the demand for alternative healthcare grows.

Are there colleges in North Dakota or nearby that offer this program?

Northwestern Health Sciences University | Bloomington, MN

- Pre-chiropractic schools:
 - o The University of North Dakota | Grand Forks, ND
 - o Bismarck State College | Bismarck, ND
 - o Dickinson State University | Dickinson, ND
 - o Jamestown College | Jamestown, ND
 - o North Dakota State College of Science | Wahpeton, ND
 - o Williston State College | Williston, ND

What is a Clinical Laboratory Scientist or Medical Technologist?

- Clinical Laboratory Scientists, also known as Medical Technologists, analyze human blood, tissues, and body fluids.
- They use thousands of types of medical laboratory tests that use a variety of tools and instruments. Doctors depend on Clinical Laboratory Scientists to produce reliable results to see if a patient has anything wrong with them.
- Clinical Laboratory Scientists can work in many different areas including:
 - Clinical chemistry – analyzing chemical substances present in blood
 - Blood banking – Preparing blood for transfusions
 - Immunohematology – Determining if blood from a blood donor can be used for a patient
 - Hematology – Looking at cells that are not normal and diseases that are in the blood
 - Microbiology – Finding and identifying bacteria, fungi, viruses and parasites that can cause disease
 - Immunology – Seeing how immune or resistant to disease something is
 - Urinalysis – Analyzing different chemicals and cells in urine
 - Toxicology – Finding and identifying toxic substances and drugs in body fluids

What education and training do I need?

- A four year (bachelor's) degree
- They usually take three or four years of college classes, plus one year of clinical laboratory education in a health facility like a hospital or clinic.

Years in School: 4-5

What do Clinical Laboratory Scientists/Medical Technologists earn?

The average salary in the United States is \$66,995 per year.

Is there a need for Clinical Laboratory Scientists/ Medical Technologists?

Yes, there is a demand for this profession. Odds are if you are a Clinical Laboratory Scientist or Medical Technologist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
Bismarck State College | Bismarck, ND
North Dakota State University | Fargo, ND
Rasmussen College | Bismarck, ND and Fargo, ND
Turtle Mountain Community College | Belcourt, ND

What is a Clinical Laboratory Technician/ Medical Laboratory Technician?



- Clinical Laboratory Technicians discover the presence or absence of disease and provide information that helps physicians determine what the best treatment for a patient is
- They do not see the patients they help in person, but they play a very important role in providing care to patients
- CLTs use very sophisticated instruments and technology to examine different body fluids, tissues, and cells to find bacteria and other things that can make people sick
- CLTs also look at test results and help doctors understand what they mean

What education and training do I need?

- A two year associate's degree
- Pass a certification exam

Years in School: 2-4

What do Clinical Laboratory Technicians earn?

The average salary in the United States is \$51,770 per year.

Is there a need for Clinical Laboratory Technicians?

Yes, there is a demand for this profession. Odds are if you are a Clinical Laboratory Technician, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
North Dakota State College of Science | Wahpeton, ND
Williston State College | Williston, ND

What is a Dentist?

- Dentists help people maintain their overall oral (mouth) health
- Dentists are trained to treat patients from young to old, and examine patients head and neck to identify and diagnose oral problems
- They can fix or replace teeth that are damaged, perform surgery on teeth and gums, take teeth out of a patient if needed, and tell people how to keep their oral health in good condition
- Dentists can also help teach how to correctly brush and floss, and how to use special products so patients can maintain a healthy mouth.



What education and training do I need?

- Four year bachelor's degree
- Dental school for an additional four years

(Some dental schools will consider accepting students who do not have a four year degree, but they prefer those who have a college degree.)

Years in School: 8

What do Dentists earn?

The average salary in the United States is \$180,010 per year.

Is there a need for Dentists?

Yes, there is a demand for this profession. Odds are if you are a Dentist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

There are no Dentistry programs in North Dakota, but these schools offer pre-dentistry programs.

The University of North Dakota | Grand Forks, ND

Bismarck State College | Bismarck, ND

Dickinson State University | Dickinson, ND

Jamestown College | Jamestown, ND

North Dakota State College of Science | Wahpeton, ND

Turtle Mountain Community College | Belcourt, ND

What is a Dental Assistant?

- A Dental Assistant does a variety of tasks to help out a Dentist. They can schedule appointments for patients, keep patient records, send bills, get dental records from other facilities, and order supplies Dentists may need
- Dental Assistants can also work alongside a Dentist as the Dentist is working on a patient. They can hand tools to the Dentist and help keep the patient comfortable and make the Dentists' working space (your mouth) clear for the Dentist
- Some Dental Assistants can even process dental x-rays, among other tasks.

What education and training do I need?

- Most Dental Assistants learn their skills on the job.
- Some are trained in dental assisting programs that are offered by two year colleges.
- It is recommended for someone interested in becoming a Dental Assistant to take the Certified Dental Assistant Exam after they have had either on the job or school training.

Years in School: 1-2

What do Dental Assistants earn?

The average salary in the United States is \$38,690 per year.

Is there a need for Dental Assistants?

Yes, there is a demand for this profession. Odds are if you are a Dental Assistant, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

North Dakota State College of Science | Wahpeton, ND
Williston State College | Williston, ND

What is a Dental Hygienist?

- Dental Hygienists look at a patient's oral tissues to see if there is any disease, risk of disease, or things that are not typical in a person's mouth
- Hygienists remove plaque on patient's teeth, expose and process dental X-rays, and apply cavity-preventing agents like fluoride
- Since Dental Hygienists must follow state laws, it varies from state to state what they are able to do. In some states, they can give patients shots to numb the mouth, place and carve the materials for a filling, and take out stitches.

What education and training do I need?

- High school diploma or equivalent
- Graduate from a commission-accredited dental hygiene education program (2 year community college associate degree or 4 year university based dental hygiene program)
- Pass the Dental Hygiene National Board Examination

Years in School: 4-5

What do Dental Hygienists earn?

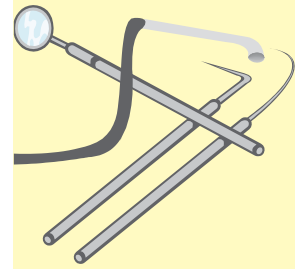
The average salary in the United States is \$74,680 per year.

Is there a need for Dental Hygienists?

Yes, due to people keeping their natural teeth longer, advances in dental care, and expanding job responsibilities, Dental Hygienist positions are expected to be one of the 30 fastest growing occupations.

Are there colleges in North Dakota or nearby that offer this program?

North Dakota State College of Science | Wahpeton, ND
University of Minnesota | Minneapolis/St. Paul, MN



Close to three million miles of dental floss is purchased in the US every year.

Modern toothpaste was introduced in the 1850's but fluoride wasn't introduced until 1956.

Approximately \$2 billion a year is spent on dental products like toothpastes, mouthwashes, and dental floss.

What is a Dietician?

- Dietitians assess the nutritional needs of patients after consulting with physicians and other healthcare professionals
- Dietitians are experts in designing nutrition programs to protect health, prevent allergic reactions, and help people avoid symptoms of disease.
- Dietitians find out what their patient's nutritional needs are, create plans to meet those needs, and report and evaluate their results.
- They work with doctors and other healthcare professionals to coordinate patients' medical and dietary needs.



What education and training do I need?

To become a registered Dietitian, you must receive a bachelor's (four year) degree and pass a national exam.

Years in School: 4-5

What do Dieticians earn?

The average salary in the United States is \$60,150 per year.

Is there a need for Dieticians?

Yes, there is a demand for this profession. Odds are if you are a Dietitian, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
North Dakota State University | Fargo, ND

What is a Dietetic Technician?

- Dietetic Technicians work with Dietitians to plan menus and prepare food for people with special nutritional needs
- Dietetic Technicians know a great deal about nutrition and how what we eat and drink influences our health
- For people who have food allergies or other special dietary needs, Dietetic Technicians develop and prepare tasty, nutritious recipes that satisfy dietary restrictions.



What education and training do I need?

- To become a Dietetic Technician, you must complete a two-year degree at an appropriate community college
- You can then enroll in a specialized training program that includes 450 hours (about ten school or work weeks) of supervised practice working in actual food preparation environments
- Then to become certified, you must pass a national examination

Years in School: 3-4

What do Dietetic Technicians earn?

The average salary in the United States is \$29,610 per year.

Is there a need for Dietetic Technicians?

Yes, there is a demand for this profession. Odds are if you are an Occupational Therapy Assistant, your chance of finding a job in the United States is excellent.

What Schools in North Dakota (or nearby) offer this program?

Yes, there is a demand for this profession. Odds are if you are a Dietetic Technician, your chance of finding a job in the United States is excellent.

What is an Emergency Medical Technician or Paramedic?

- An Emergency Medical Technician, or EMT, is someone who comes to help when a person calls 911 and is in need of assistance
- EMT's often work with police and firefighters, and once they arrive to the scene of an emergency, they see what condition the patient is in
- They provide emergency care and take the patient to a medical facility like a hospital, clinic, or emergency room
- In some situations EMT's and paramedics work as part of a helicopter crew that rushes patients to hospitals when extreme medical attention is required more quickly.

What education and training do I need?

- Generally, a high school diploma is required to start a training program to become an EMT or paramedic
- EMTs and Paramedics must complete a formal training and certification process. You must also be licensed in the state you work in to be an EMT or Paramedic.

Years in School: Up to 2

What do Emergency Medical Technicians and Paramedics earn?

The average salary in the United States is \$36,700 per year.

Is there a need for Emergency Medical Technicians and Paramedics?

Yes, there is a demand for this profession. Odds are if you are an Emergency Medical Technician or Paramedic, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

Bismarck State College | Bismarck, ND

Dakota College at Bottineau | Bottineau, ND

North Dakota State College of Science | Wahpeton, ND

What is a Healthcare Administrator?

- Healthcare Administrators are in charge of hospitals, physician group practices, nursing homes and home health agencies
- Healthcare Administrators have the responsibility to manage an entire facility or system

What education and training do I need?

- High school diploma or equivalent
- Bachelor's degree, Master's degree or Doctoral degree in health services administration, long-term care administration, health sciences, public health, public administration, or business administration

Years in School: 4-6

What do Healthcare Administrators earn?

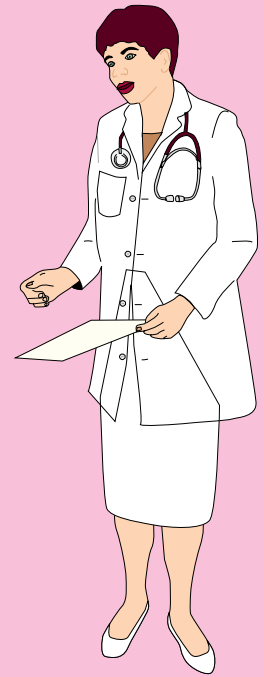
Healthcare Administrators earn anywhere from \$60,000-\$110,000 per year.

Is there a need for Healthcare Administrators?

Applications with work experience in the healthcare field and strong business and management skills should have the best opportunities.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
University of Mary | Bismarck, ND



Health administration programs in North Dakota can be found in a couple different schools.

If you are interested in the business side, you can obtain a master of business administration with a focus in healthcare. For a more general degree, you can pursue a certificate in health administration.

What is a Massage Therapist?

- Massage Therapists manipulate soft tissue – the skin, muscles, tendons, ligaments, and fascia (membranes surrounding muscles)

What education and training do I need?

- High School diploma or equivalent
- State regulatory requirements for massage practice range from minimum of 300 in-class hours at a recognized massage school to 1,000 in-class hours of massage training in an accredited massage program

Years in School: 1-2

What do Massage therapists earn?

Massage therapists in the United States earn an average of \$44,950 per year.

Is there a need for Massage therapists?

The health and fitness movement is a driving force behind the growth of the massage therapy profession, as is America's growing emphasis on wellness. The older population in nursing homes and assisted living facilities also are benefiting from regular massage therapy.

Are there colleges in North Dakota or nearby that offer this program?

Northland Community and Technical College | East Grand Forks, MN
Williston State College | Williston, ND

What is a Microbiologist?

- Microbiologists investigate the growth, structure, development, and other characteristics of microscopic organisms such as bacteria, algae, or fungi.
- Microbiologists study the relationship between organisms and disease or the effects of antibiotics on microorganism

What education and training do I need?

- High school diploma or equivalent
- Bachelor's degree in Microbiology or other related area
- Master's degree

Years in School: 4

What do Microbiologists earn?

Microbiologists earn an average of \$78,400 per year

Is there a need for Microbiologists?

Yes, there is a demand for Microbiologists to research and help understand viruses, bacteria and fungi that are harmful to the environment and people. Odds are if you are a Microbiologist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

North Dakota State University | Fargo, ND

The University of North Dakota | Grand Forks, ND

What is a Nurse Practitioner?

- Nurse Practitioners are Registered Nurses who continue on to get a graduate school level of education in nursing.
- They provide care to patients throughout the patients' lifespan. They work with everyone from premature babies to the elderly.
- Nurse Practitioners perform physical examinations, diagnose and treat illnesses and injuries, provide immunizations, and help patients who have problems like high blood pressure, diabetes, or depression. They also order and look at tests like x-rays and laboratory tests.
- Nurse Practitioners also prescribe medication for patients.

What education and training do I need?

- Nurse Practitioners have a master's degree, which requires two years of full-time study beyond the bachelor's degree (which is a four year degree) in nursing.

Years in School: 6-8

What do Nurse Practitioners earn?

The average salary in the United States is \$107,480 per year.

Is there a need for Nurse Practitioners?

Yes, there is a demand for this profession. Odds are if you are a Nurse Practitioner, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND

North Dakota State University | Fargo, ND

University of Mary | Bismarck, ND

What is a Nurse?

- Nurses observe, assess, and record symptoms, reactions, and progress to provide the care a patient needs.
- Nurses can work in many different settings, and they work with many other healthcare professionals to provide care to patients.
- Nurses create and manage nursing care plans, tell patients and their families how to properly care for themselves or their loved one, and they help people take steps to improve or maintain their health.



What education and training do I need?

- To become a Registered Nurse, you can take different education paths.
 - Bachelor's degree in nursing, also called a BSN, takes about four years to complete
 - A diploma in nursing will takes about three years to complete.

Years in School: 3-4

What do Nurses earn?

The average salary in the United States is \$71,000 per year.

Is there a need for Nurses?

Yes, there is a demand for this profession. Odds are if you are a Nurse, your chance of finding a job in the United States is excellent. According to the Bureau of Labor Statistics, Registered Nurses are among the top ten occupations with the largest job growth.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
Bismarck State College | Bismarck, ND
Dakota College at Bottineau | Bottineau, ND
Jamestown College | Jamestown, ND
Lake Region State College | Devils Lake, ND
Medcenter One College of Nursing | Bismarck, ND
North Dakota State College of Science | Wahpeton, ND
North Dakota State University | Fargo, ND
University of Mary | Bismarck, ND

Once you are a professional nurse, you might choose to focus on a particular specialty. There are numerous specialty options — each of which has its own education/certification requirements and related professional network or organization.

These include:

- Advanced Practice Registered Nursing
- Ambulatory Care Nursing
- Business in Nursing
- Camp Nursing
- Cardiac Care Nursing
- Cardiac Cath Lab Nursing
- Case Management Nursing
- Clinical Nurse Leader
- Clinical Nurse Specialist
- Community Health Nursing
- Complementary Health Nursing
- Correctional Facility Nursing
- Critical Care Nursing
- Dermatology Nursing
- Developmental Disability Nursing
- Diabetes Nursing
- Domestic Violence Nursing
- Emergency Nursing
- Ethics in Nursing
- Family Nurse Practitioner
- Flight/Transport Nursing
- Forensic Nursing
- Gastroenterology Nursing
- Genetics Nursing
- Geriatric Nursing
- Gerontological Nurse Practitioner
- Gynecology/Obstetric Nursing
- Health Policy Nursing
- Hematology Nursing
- HIV/AIDS Nursing
- Holistic Nursing
- Home Healthcare Nursing
- Hospice/Palliative Nursing
- Independent Nurse Contracting
- Infection Control Nursing
- Informatics Nursing
- Infusion Nursing
- International Nursing
- Labor & Delivery Nursing
- Lactation Consultation
- Legal Nurse Consulting
- Licensed Practical Nursing (LPN)
- Long-Term Care Nursing
- Managed Care Nursing
- Medical-Surgical Nursing
- Military and Uniformed Service Nursing
- Missionary Nursing
- Neonatal Intensive Care Nursing
- Nephrology Nursing
- Neuroscience Nursing
- Nurse Anesthetist
- Nurse Attorney
- Nurse Educator
- Nurse Legislator
- Nurse Life Care Planning
- Nurse Midwife
- Nurse Practitioner
- Nurse Researcher
- Nursing Advocacy
- Nursing Entrepreneur
- Nursing Executive and Nursing CEO
- Nursing Manager and Nursing Administration
- Nursing Quality Improvement
- Nursing Writer, Author, or Historian
- Occupational Health Nurse
- Oncology Nursing (Cancer Nursing)
- Operating Room Nursing (Perioperative Nursing)
- Ophthalmic Nursing
- Orthopedic Nursing
- Otorhinolaryngology Nursing (Head and Neck Nursing)
- Overseas, Development, Volunteer, Missionary or Refugee Nursing
- Pain Management Nursing
- Parish Nursing
- Pediatric Endocrinology Nursing
- Pediatric Nurse Practitioner
- Pediatric Nurse
- Perianesthesia Nursing (Recovery Room Nursing)
- Perinatal Nursing
- Plastic Surgery Nursing
- Poison Information Specialist
- Psychiatric Nurse Practitioner
- Psychiatric Nursing
- Public Health Nurse
- Pulmonary Care Nursing (Respiratory Nursing)
- Radiology Nursing
- Registered Nurse (RN)
- Rehabilitation Nursing
- Reproductive Nursing
- Rheumatology Nursing
- School Nursing
- Sub-Acute Nursing
- Substance Abuse Nursing
- Supplemental/Agency Nursing
- Surgical Nursing
- Telemetry Nursing
- Telephone Triage Nursing
- Toxicology Nursing
- Transcultural Nursing
- Transplant Nursing
- Trauma Nursing
- Travel Nursing
- Triage Nursing
- Urologic Nursing
- Vocational/Licensed Practical Nurse
- Wound & Ostomy Nursing

What is a Nurse Anesthetist?

- Certified Registered Nurse Anesthetists safely provide anesthesia care to surgical, obstetrical and trauma patients
- CRNAs administer every type of anesthetic, work in every type of practice setting and provide care for every type of operation or procedure-from open heart surgery to pain management programs
- CRNA's stay with their patients through the entire surgery/procedure.
- Certified Registered Nurse Anesthetists monitor every important body function and individually modifying the anesthetic to ensure maximum safety and comfort during surgery.
- CRNA's oversee recovery from anesthesia after surgery in the recovery room to the patient care unit
- CRNAs work with surgeons, anesthesiologists, dentists, podiatrists, and other qualified healthcare professionals

What education and training do I need?

- Bachelor of Science in Nursing or appropriate baccalaureate degree
- Minimum of one year experience as a registered nurse in an acute care setting
- Graduate programs last 2-3 years
- Pass the national certification examination

Years in School: 6-7

What do Nurse Anesthetists earn?

Nurse Anesthetists in the United States earn an average of \$169,450 per year.

Is there a need for Nurse Anesthetists?

The prospects for finding a good job in this field are excellent for the foreseeable future: According to the U.S. Department of Health and Human Services, there is a significant and growing need for CRNAs across the country.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND

What is a Licensed Practical Nurse?

- Licensed Practical Nurses, also called LPNs, provide hands-on care to patients under the supervision of a Registered Nurse or Doctor.
- LPNs take vital signs such as temperature, blood pressure, pulse, and respiration (breathing). They also treat bedsores, prepare and give injections, apply dressing, apply ice packs and hot water bottles, and many other tasks.
- Experienced LPNs may supervise nursing assistants and aids.



What education and training do I need?

- LPNs are required to pass an exam after complete a practical nursing program. A high school diploma, or equivalent, is usually required for entry.

Years in School: 1-2

What do LPNs earn?

The average salary in North Dakota is \$42,400 per year.

Is there a need for LPNs?

Yes, there is a demand for this profession. Odds are if you are a Licensed Practical Nurse, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

Bismarck State College | Bismarck, ND
Dakota College at Bottineau | Bottineau, ND
Fort Berthold Community College | New Town, ND
Lake Region State College | Devils Lake, ND
North Dakota State College of Science | Wahpeton, ND
Sitting Bull College | Fort Yates, ND
United Tribes Technical College | Bismarck, ND
Williston State College | Williston, ND

What is an Occupational Health and Safety Expert?

- Design programs to control, eliminate, or prevent health problems caused by chemical, physical, or biological agents
- Advise organizations about using more ergonomically-designed equipment or furniture
- Conduct occupational safety inspections or evaluate how well employers adhere to laws, regulations or policies designed to protect their workers' health and safety

What education and training do I need?

In high school:

- Take plenty of courses in math, life sciences, physical sciences and English/writing.
- Seek opportunities to volunteer with environmental protection or public health concerns.
- Design a science fair project that addresses how companies can reduce the risk of a specific type of injury on the job.

In college:

- Major in civil engineering, biology, geology, physics, environmental engineering or some other scientific area.
- Enroll in a summer program or internship that focuses on environmental health or occupational safety.

Years in School: 4-6

What do Occupational Health and Safety Experts earn?

The average salary of an occupational health and safety is \$53,930 per year.

Is there a need for Occupational Health and Safety Experts?

The job outlook for an occupational health and safety expert is very good.

What is an Occupational Therapist?

- Occupational Therapists help their patients perform everyday tasks. For example, if someone has a stroke and cannot use their right hand like they used to be able to, it might be very hard for them to do everyday things like get dressed, make lunch, or even clean their home.
- Occupational Therapists help people by giving them special tools and helping them come up with creative ways to do things differently so the patient can do everyday things successfully.

What education and training do I need?

- Occupational Therapists require a master's degree, which is a four year degree plus two more years of school.
- You must also go to a healthcare facility for six months to practice what they have learned in school before you can become a licensed Occupational Therapist.

Years in School: 6

What do Occupational Therapists earn?

The average salary in the United States is \$84,640 per year.

Is there a need for Occupational Therapists?

Yes, there is a demand for this profession. Odds are if you are an Occupational Therapist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
University of Mary | Bismarck, ND

What is an Occupational Therapy Assistant?



- Occupational Therapy Assistants do many of the tasks that Occupational Therapists do.
- They help their patients perform everyday tasks by doing different activities and exercises that are in the patients' treatment plan, which the Occupational Therapist makes.
- Occupational Therapy Assistants monitor how patients are improving and provide encouragement.

What education and training do I need?

- You must complete an associate's degree or certificate program from either a community college or technical school to qualify for an Occupational Therapy Assistant job.

Years in School: 2

What do Occupational Therapy Assistants earn?

The average salary in the United States is \$59,470 per year.

Is there a need for Occupational Therapy Assistants?

Yes, there is a demand for this profession. Odds are if you are an Occupational Therapy Assistant, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

North Dakota State College of Science | Wahpeton, ND

Northland Community & Technical College | East Grand Forks, MN

What is an Optometrist?

- An Optometrist is the person you see when you get your eyes checked.
- Optometrists give eye exams, and help people if they have a disease, injury, or disorder with their eyes.
- Optometrists write prescriptions for eyeglasses and contact lenses, and help people from the very young to very old maintain the overall health of their eyes.

What education and training do I need?

- A four year college degree
- After that, you take a test called the Optometry College Admission Test and apply to a school of optometry.
- To get your degree in optometry, you then go to an optometry school for four years.

Years in School: 8

What do Optometrists earn?

The average salary in the United States is \$119,100 per year.

Is there a need for Optometrists?

Yes, there is a demand for this profession. Odds are if you are an Optometrist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

There are no Optometry programs in North Dakota, but these schools offer pre-optometry programs.

Bismarck State College | Bismarck, ND

Dickinson State University | Dickinson, ND

Jamestown College | Jamestown, ND

North Dakota State College of Science | Wahpeton, ND

Turtle Mountain Community College | Belcourt, ND

Williston State College | Williston, ND



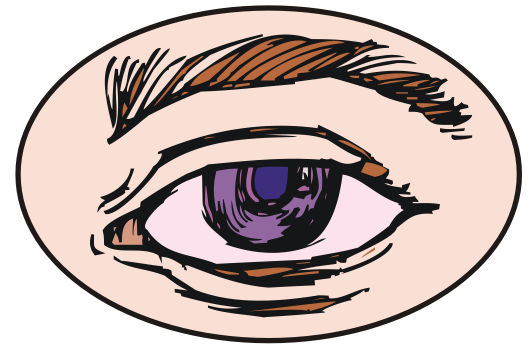
Your eyes are composed of more than 2 million working parts.

On average you blink about 11,500 times per day or about 4.2 million times per year.

Your eyes are the most complex organs you possess except for your brain.

What is an Ophthalmic Technician?

- An Ophthalmic Technician helps an eye doctor, or Ophthalmologist, collect information that helps the doctors treat eye diseases and problems.
- They get medical histories from the patients, measure and record the patient's vision, give patients medicine for eyes if needed, perform simple eye exams, and help doctors with eye surgery.



What education and training do I need?

- There are several routes you can take to becoming an Ophthalmic Technician.
- You need either two years of experience in performing eye screenings for this profession, or you need to complete an Ophthalmic Technician program, or complete an approved ophthalmic assistant education program along with one year of experience as an ophthalmic assistant, or you can have an equivalent combination of the training and experience required.

Years in School: 1-2

What do Ophthalmic Technicians earn?

The average salary in the United States is \$37,500 per year.

Is there a need for Ophthalmic Technicians?

Yes, there is a demand for this profession. Odds are if you are an Ophthalmic Technician, your chance of finding a job in the United States is favorable.

What is an Optician?

- An Optician examines prescriptions to determine what kinds of lenses are needed for a patient. You can think of them as the “pharmacist of the eye glasses world.”
- They recommend eyeglass frames, lenses, and lens coatings after considering what the patient’s needs are.
- Opticians measure the clients’ eyes, including the distance between the centers of the pupils and the distance between the ocular surface and the lens.
- After the glasses are made, Opticians make sure they are correct. They help bend the glasses so they fit comfortably, and explain how to properly wear and care for their eyeglasses.

What education and training do I need?

- Opticians can receive a combination of Optician apprenticeship career training or college education. Education includes basic knowledge of vision loss, how it occurs, and how to help. If you’re interested in this field, you should have some basic business skills as well.

Years in School: 1-2

What do Opticians earn?

The average salary in the United States is \$39,070 per year.

Is there a need for Opticians?

Yes, there is a demand for this profession. Odds are if you are an Optician, your chance of finding a job in the United States is very good.

What is a Pharmaceutical Scientist?

- Pharmaceutical Scientists discover, develop, test, and make new medications.
- They spend most of their time in a laboratory studying how different things interact with the human body and with the cells and organisms that cause disease. Making new medicines takes a long time and requires a large team of scientists.
- They help make better, safer drugs, and help find the best way for people to use them.

What education and training do I need?

- In college, you can major in the pharmaceutical sciences, pharmacy, biology, chemistry, medicine, engineering or a related field.
- The four-year curriculum for the B.S. in Pharmaceutical Sciences begins with coursework in mathematics and the basic sciences (chemistry, biology, physics). This inter-disciplinary program then progresses to advanced coursework in the pharmaceutical sciences, including aspects of drug design and synthesis, mechanisms of drug action, pharmacology and toxicology, dosage formulation, manufacturing, quality assurance, and regulatory compliance. The curriculum also includes elective credits for individual preparation and educational focus.

Years in School: 4-6

What do Pharmaceutical Scientists earn?

The average salary in the United States is \$85,000 per year. They also can receive bonuses when they successfully develop a new drug.

Is there a need for Pharmaceutical Scientists?

Yes, there is a demand for this profession and the job outlook is very good.

Are there colleges in North Dakota or nearby that offer this program?

North Dakota State University | Fargo, ND

What is a Pharmacist?

- Pharmacists dispense medications prescribed by doctors and other health professionals and they monitor patient health.
- They advise doctors on which medications should be used, how much should be used, and what the possible side effects are.
- Pharmacists must understand the use and effects of drugs, and must also know what they are made of. They are medication experts.

What education and training do I need?

- After completing two years of college, you must attend a pharmacy school for four years.
- You can also go for an additional two years of schooling for a higher pharmacy degree.

Years in School: 6-8

What do Pharmacists earn?

The average salary in the United States is \$121,710 per year.

Is there a need for Pharmacists?

Yes, there is a demand for this profession. Odds are if you are a Pharmacist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

North Dakota State University | Fargo, ND



The scales used in pharmacies are so sensitive they can weigh one grain of salt.

Maple syrup was once used to cure colds.

Aspirin went on sale as the first pharm-aceutical drug in 1899

What is a Pharmacy Technician?

- Pharmacy Technicians work under the direct supervision of a Pharmacist.
- They assist Pharmacists in any way they are licensed to, and refer any questions regarding prescriptions, drug information, or health questions to a Pharmacist.
- You can think of Pharmacy Technicians as a Pharmacists' assistant in some ways.

What education and training do I need?

- To become a Pharmacy Technician, you must complete a two year program.

Years in School: 2

What do Pharmacy Technicians earn?

The average salary in the United States is \$33,060 per year.

Is there a need for Pharmacy Technicians?

Yes, there is a demand for this profession. Odds are if you are a Pharmacy Technician, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

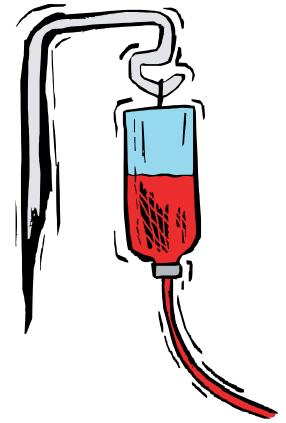
North Dakota State College of Science | Wahpeton, ND

Northland Community & Technical College | East Grand Forks, MN

Rasmussen College | Bismarck, ND and Fargo, ND

What is a Phlebotomist?

- A Phlebotomist collects samples of blood and other fluids from a patient.
- Because people don't like to be stuck with needles, phlebotomists have to be very good at making people feel comfortable and safe.
- A Phlebotomist explains what they will do to the patient, and after taking the blood sample they label the sample, and make sure it includes all important information about the person.



What education and training do I need?

- To become a Phlebotomist, many states require you to complete a certificate program and some training.
- You do not need a college degree for this profession, and because of this many people who want to go into other healthcare jobs do this part time while going to school for something else.

Years in School: Up to 1

What do Phlebotomists earn?

The average salary in the United States is \$34,710 per year.

Is there a need for Phlebotomists?

Yes, there is a demand for this profession. Odds are if you are a Phlebotomist, your chance of finding a job in the United States is excellent.

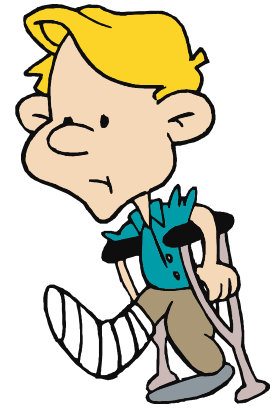
Are there colleges in North Dakota or nearby that offer this program?

Bismarck State College | Bismarck, ND

Northland Community & Technical College | East Grand Forks, MN

What is a Physical Therapist?

- Physical Therapists treat patients with exercise, light, heat, cold, water, electricity, ultrasound, and massage.
- Physical Therapists help improve patients' strength and mobility, relieve pain, and take a personal and direct approach to meeting an individual's health goals.
- They work closely with the patient and other healthcare practitioners and develop a continuing program of physical rehabilitation for the patient



What education and training do I need?

- To become a Physical Therapist, you need to attend a physical therapy school. By attending a physical therapy school, you earn a Doctoral degree.
- Some schools require a four-year degree before attending physical therapy school, while other schools require a completion of certain courses (mostly in the psychology and science fields) before applying for physical therapy school.

Years in School: 6-9

What do Physical Therapists earn?

The average salary in the United States is \$88,080 per year.

Is there a need for Physical Therapists?

Yes, there is a demand for this profession. Odds are if you are a Physical Therapist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
University of Mary | Bismarck, ND

What is a Physical Therapist Assistant?

- Physical Therapist Assistants help with various physical therapy procedures and related tasks. They are under the direct supervision of a Physical Therapist.
- Their name reflects what they do – assist Physical Therapists.
- They help patients who have a hard time moving because of injury or disease, and help Physical Therapists with various “therapies” that help make the patient better, physically.

What education and training do I need?

- To become a Physical Therapist Assistant, you need an Associate’s (two year) degree.

Years in School: 2

What do Physical Therapist Assistants earn?

The average salary in the United States is \$57,620 per year.

Is there a need for Physical Therapist Assistants?

Yes, there is a demand for this profession. Odds are if you are a Physical Therapist Assistant, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

Northland Community & Technical College | East Grand Forks, MN

What is a Physician?

- Physician – it's just another name for a Doctor! Physicians examine patients, get their medical histories, and order, perform, and interpret diagnostic tests.
- They help people with illness, injuries, health conditions, and help patients prevent health problems.
- Becoming a Physician is one of the most selfless career choices you can make!
- Although Physicians make a lot of money, it is not a career you choose to become rich. Physicians can work many hours, but they get to help people every day, and they have a very, very important job!



What education and training do I need?

- To become a Physician, there are several steps in the education process. First, you need at least three years of college, but many people have at least a four year degree.
- Next, you attend a medical school, where you can expect to spend four years studying basic science and doing clinical “rotations” – where you go to healthcare facilities and have hands-on experience. Usually, the first two years of medical school are spent in the classroom before students are allowed to do rotations.
- Once you finish medical school, you are an MD (a doctor), and then you need to choose a special area to practice in, called a specialty. You can pick a specialty in one of many different areas. Depending on what specialty you choose, you have to complete a certain number of years of a residency program. A residency program is similar to an internship. You are a doctor, but before you ‘go out on your own’ you work with a Physician who already practices in that area. This is important because Physicians have a very important job – helping humans! Physicians, and their patients, want to be sure they have plenty of practice before they go out on their own to help people.

Years in School

10-15 (This may seem like a lot of school, but if you want to be a physician, don't let these numbers change your mind! The next time you visit a Doctor, ask them about their experience in school.)

What do Physicians earn?

The average salary in the United States is \$214,700 per year.

Is there a need for Physicians?

Yes, there is a demand for this profession. Odds are if you are a Physician, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND

Once you are a physician, you might choose to focus on a particular specialty. There are numerous specialty options — each of which has its own education/certification requirements and related professional network or organization

These include:

- Addiction Medicine
- Allergy/ Immunology
- Ambulatory
- Anesthesiology: Pediatrics
- Anesthesiology: General
- Anesthesiology: Pain Management
- Bariatric (Weight Loss) Surgery
- Cardiology: Invasive
- Cardiology: Interventional
- Cardiology: Noninvasive
- Critical Care
- Dermatology
- Emergency Medicine
- Endocrinology
- FP (with OB)
- FP (w/o OB)
- FP - Sports Medicine
- FP - Urgent Care
- Gastroenterology
- Hematology/Oncology
- Infectious Disease
- Internal Medicine
- Internal Medicine (Hospitalist)
- Medicine/Pediatrics
- Medical Oncology
- Neonatal Medicine
- Nephrology
- Neurology
- Obstetrics/Gynecology
- Gynecology
- Maternal/Fetal Medicine
- Occupational Medicine
- Ophthalmology
- Ophthalmology Retina
- Orthopedic Surgery
- ORS - Foot & Ankle
- ORS - Hand & Upper Extremities
- ORS - Hip & Joint Replacement
- ORS - Spine Surgery
- ORS - Sports Medicine
- Otorhinolaryngology
- Pathology
- Pediatrics
- Pediatrics - Cardiology
- Pediatrics - Critical Care
- Pediatrics - Hematology/Oncology
- Pediatrics - Neurology
- Podiatry
- Psychiatry
- Psychiatry - Child and Adolescent
- Pulmonary Medicine + Critical Care
- Radiation Oncology
- Radiology
- Rheumatology
- Surgery - General
- Surgery - Cardiovascular
- Surgery - Neurological
- Surgery - Plastic
- Surgery - Vascular
- Urology

What is a Physician Assistant?

- Physician Assistants provide healthcare services similar to a Nurse Practitioner.
- Physician Assistants perform routine examinations, run diagnostic tests, order and interpret laboratory tests and x-rays, rehabilitative and preventive healthcare, health screening, manage therapy for chronic health problems, perform minor surgical procedures, assist with surgery, and issue prescription orders and medications.



What education and training do I need?

- To become a Physician Assistant, you must attend a Physician Assistant program.

Years in School: 6

What do Physician Assistants earn?

The average salary in North Dakota is \$74,898 per year.

Is there a need for Physician Assistants?

Yes, there is a demand for this profession. Odds are if you are a Physician Assistant, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND

What is a Professional Counselor?

- Professional Counselors provide mental health and substance abuse care.
- They treat people who have mental, behavioral, and emotional problems, and can also help with problems people may have with personal growth, careers, and other areas.
- A Professional Counselor can treat mental health disorders, addiction, disability and employment needs, school problems, and trauma. It is important Counselors are able to see these problems so they can help their patients in the right way.



What education and training do I need?

- To become a Professional Counselor, you must have a master's degree in a specific area, and have at least two years of experience.

Years in School: 6

What do Professional Counselors earn?

The average salary in the United States is \$45,344 per year.

Is there a need for Professional Counselors?

Yes, there is a demand for this profession. Odds are if you are a Professional Counselor, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

North Dakota State University | Fargo, ND

The University of North Dakota | Grand Forks, ND

What is a Professional Counselor?

- Professional Counselors provide mental health and substance abuse care.
- They treat people who have mental, behavioral, and emotional problems, and can also help with problems people may have with personal growth, careers, and other areas.
- A Professional Counselor can treat mental health disorders, addiction, disability and employment needs, school problems, and trauma. It is important Counselors are able to see these problems so they can help their patients in the right way.

What education and training do I need?

- To become a Professional Counselor, you must have a master's degree in a specific area, and have at least two years of experience.

Years in School: 6

What do Psychologists earn?

The average salary in the United States is \$45,344 per year.

Is there a need for Psychologists?

Yes, there is a demand for this profession. Odds are if you are a Psychologist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
North Dakota State University | Fargo, ND

What is a Psychologist?

- Psychologists study the behavior, emotions and thinking processes of humans to better understand their behavior and treat patients who have mental or emotional problems.
- They study how people relate to other people and they work to improve these relationships.
- Psychologists focus on different behaviors of people that affect that person's mental and emotional health.
- They may teach, conduct research, or serve as consultants or therapists

What education and training do I need?

- Psychologists hold a doctoral degree (PhD), meaning they go to a four year college and then get a Master's and doctoral degree in Psychology

Years in School: 6-8

What do Psychologists earn?

The average salary in the United States is \$82,770 per year.

Is there a need for Psychologists?

Yes, there is a demand for this profession. Odds are if you are a Psychologist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND

Dickinson State University | Dickinson, ND

North Dakota State University | Fargo, ND

Williston State College | Williston, ND

What is a Radiologic Technologist?

- Radiologic Technologists are people who take x-rays of tissues, organs, bones and vessels in the body to help physicians diagnose medical problems.
- They help get patients ready for x-rays by explaining what will happen, removing jewelry and other things that the x-ray cannot show through, and putting the patient in the correct spot so the body parts are correctly x-rayed.
- They are responsible for patient assessment and preparation for radiologic procedures and for image production for analysis by a radiologist



What education and training do I need?

- To become a Radiologic Technologist, you can get either a two year degree or four year degree. The two year degree is most common.

Years in School: 2-4

What do Radiologic Technologists earn?

The average salary in the United States is \$60,320 per year.

Is there a need for Radiologic Technologists?

Yes, there is a demand for this profession. Odds are if you are a Radiologic Technologist, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

Minot State University | Minot, ND

North Dakota State University | Fargo, ND

Northland Community & Technical College | East Grand Forks, MN

University of Mary | Bismarck, ND

What is a Respiratory Therapist?

- Respiratory Therapists evaluate, treat, and care for patients with breathing or other cardiopulmonary disorders.
- Respiratory Therapists assume primary responsibility for all respiratory care, therapeutic treatments, and diagnostic procedures

What education and training do I need?

- High school diploma or equivalent
- Two-year associate degree or a four-year bachelor's program
- Pass an examination that leads to the Registered Respiratory Therapist (RRT) credential

Years in School: 2-3

What do Respiratory Therapists earn?

Respiratory therapists earn an average of \$61,810.

Is there a need for Respiratory Therapists?

Yes, there is a need for Respiratory Therapists. Odds are, if you are a Respiratory Therapist, your odds of finding a job are excellent.

Are there colleges in North Dakota or nearby that offer this program?

Students may complete the first two years of study toward a Bachelor of Science degree in Respiratory Care by following the suggested curriculum. The remaining two years of study may be completed at the North Dakota School of Respiratory Care at St. Alexius Medical Center, with the University of Mary being the degree-granting institution. This is a transfer program (Transfer programs are intended for those students who plan to continue their degree studies at a four-year college or university. One or two years of study are taken at a tech or four-year college to complete general education requirements and some major field requirements before transferring to a four-year college that offers the program that you are seeking to get a degree in.)

Bismarck State College | Bismarck, ND

University of Mary | Bismarck, ND

Northland Community & Technical College | East Grand Forks, MN

What is a Social Worker?

- Social Workers help people function as best they can if they are in situations that are challenging.
- They assist individuals, groups, or communities to restore or enhance their capacity for social functioning. The approach to care is oriented toward problem-solving and promoting positive social change.
- Professional social workers respond to and help prevent crises, and they counsel individuals, families, and communities on how to cope with the stresses of everyday life.
- Social workers frequently work with people with socio-economic disadvantages, including severe poverty, unemployment, discrimination, or inadequate housing. They also help people who have serious illness, disabilities, or substance abuse problems, as well as families with serious domestic conflicts, sometimes involving child or spousal abuse.



What education and training do I need?

- To become a Social Worker, you need a bachelor's (four year) degree.
- Some jobs require you to have a master's degree, which is usually an additional two years of school after you get your four year degree.

Years in School: 4-6

What do Social Workers earn?

The average salary in the United States is \$51,630 per year.

Is there a need for Social Workers?

Yes, there is a demand for this profession. Odds are if you are a Social Worker, your chance of finding a job in the United States is excellent.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota | Grand Forks, ND
University of Mary | Bismarck, ND

What is a Speech-Language Pathologist?

- Speech-language pathologists assess, diagnose, treat, and help to prevent speech language, cognitive, communication, voice, swallowing and other related disorders.
- Speech-language pathologists work with people who:
 - o cannot make speech sounds, or cannot make them clearly
 - o those with speech rhythm and fluency problems, such as stuttering
 - o people with voice quality problems such as inappropriate pitch or harsh voice
 - o those with problems understanding and producing language
 - o those who wish to improve their communication skills by modifying an accent
 - o those with cognitive communication impairments, such as attention, memory, and problem solving disorders
 - o those who have oral motor problems causing eating and swallowing difficulties

What education and training do I need?

- High school diploma or equivalent
- Bachelor's degree
- Master's degree
- Passing a national examination
- Completion or a supervised Clinical Fellowship Year (CFY).
- ASHA Certificate of Clinical Competence (CCC)

Years in School: 6

What do Speech Language Pathologists earn?

The average salary for a speech language pathologist is \$79,770 per year.

Is there a need for Speech Pathologists?

Job outlook for speech-language pathologists is excellent. More recognition of problems in preschool and school-age children by teachers and parents, the increased numbers of older citizens, and medical advances, has created a growing need for speech and language services.

Are there colleges in North Dakota or nearby that offer this program?

The University of North Dakota |Grand Forks, ND

Minot State University |Minot, ND

Moorhead Minnesota State University |Moorhead, MN

What is a Surgical Technologist?

- Surgical Technologists are members of operating room teams, which most commonly include surgeons, anesthesiologists, and circulating nurses.
- Before an operation, Surgical Technologists help prepare the operating room by setting up surgical instruments and equipment, sterile drapes, and sterile solutions.
- They assemble both sterile and non-sterile equipment, as well as adjust and check it to ensure it is working properly.
- Technologists also get patients ready for surgery by washing, shaving, and disinfecting incision sites.
- They transport patients to the operating room, help position them on the operating table, and cover them with sterile surgical “drapes.”
- Surgical Technologists also observe patients’ vital signs, check charts, and assist the surgical team with putting on sterile gowns and gloves.
- During surgery, Surgical Technologists pass instruments and other sterile supplies to surgeons and surgeon assistants

What education and training do I need?

- High school diploma or equivalent
- Surgical Technologist programs vary from 12 to 24 months which may lead to a certificate, diploma, or associate degree

Years in School: 1-2

What do Surgical Technologists earn?

Surgical technologists earn an average of \$48,060 per year.

Is there a need for Surgical Technologists?

Employment opportunities for Surgical Technologists are one of rapid growth. Employment of Surgical Technologists is expected to grow faster than the average for all occupations through the year 2014 as the volume of surgery increases.

Are there colleges in North Dakota or nearby that offer this program?

Bismarck State College | Bismarck, ND

Northland Technical College | East Grand Forks, MN

What is a Veterinarian?

- Vets or doctors of veterinary medicine diagnose, and treat diseases and injuries of pets, such as dogs and cats, and farm animals, such as cattle or horses.
- Vets examine the animal to determine the nature of disease or injury and treats the animal surgically or medically
- Some vets specialize in prevention and control of communicable animal diseases and conduct clinical research on human and animal health problems
- Vets often work long hours and spend well over 50 or more hours on the job. They need to be available for emergency calls in the evenings, nights, and on weekends

What education and training do I need?

- Like physicians, doctors of veterinary medicine must complete 4 years of pre-veterinary education and then attend a 4 year college of veterinary medicine.
- The prerequisites include biology, chemistry, animal nutrition, zoology and other college courses.
- While not required many veterinarians also attend a 1-2 year internship as a way to gain experience and knowledge after graduation.
- Veterinarians who wish to specialize and become board certified must attend a 3-4 year internship and specialized study.
- Admission to Veterinary school is very competitive. Successful candidates usually apply to more than 2 schools.

Years in School: 8

What do Veterinarians earn?

Veterinarians earn an average salary of \$101,530 per year.

Is there a need for Veterinarians?

Overall job opportunities should be excellent; however, keen competition is expected for jobs in zoos and aquariums.

Are there colleges in North Dakota or nearby that offer this program?

North Dakota does not have a school of veterinary medicine. Pre-Veterinary Medicine Programs can be found at these institutions in North Dakota:

The University of North Dakota | Grand Forks, ND

North Dakota State University | Fargo, ND

Minot State University | Minot, ND

Medical Terms and Definitions

Addiction Medicine: The branch of medicine that concentrates on helping people overcome repetitive behaviors that can range from drug and alcohol dependency to tobacco use and eating disorders.

Allergy & Immunology: The study and treatment of the body's reaction to foreign and non-foreign substances. Ailments treated by an immunologist include hay fever, asthma, hives and other abnormal responses to allergens that range from dust and food to animals and chemicals.

Anesthesiology: An anesthesiologist is a physician who specializes in the administration of anesthesia for pain relief, and the care of patients before, during, and after surgery. The anesthesiologist monitors vital organ functions including heart rate, blood pressure, breathing, and blood-oxygen saturation during surgery. Anesthesiologists may also provide diagnosis and treatment of chronic pain.

Bariatric (Weight Loss) Surgery: Surgery on the stomach and/or intestines to help a person with extreme obesity lose weight.

Cardiothoracic Surgery: Surgeons in this specialty perform cardiovascular procedures, including coronary artery bypass, heart valve repair or replacement, and correction of other defects of the heart. These physicians also perform surgery on the major arteries, the lungs, and the esophagus.

Cardiovascular Disease: A cardiologist is a physician certified to treat problems of the cardiovascular system such as the heart, arteries, and veins of the body, to prevent, diagnose, and treat heart disease.

Critical Care Medicine: Critical Care is a branch of medicine concerned with the provision of life support or organ support systems in patients who are critically ill who usually also require intensive monitoring.

Dermatology: The study and treatment of disorders and diseases of the skin, from warts to acne to skin cancers.

Emergency Medicine: The evaluation and treatment of unexpected injury and illness.

Endocrinology, Diabetes, & Metabolism: The treatment of the glands, hormones and related disorders, including diabetes and disorders of the pancreas, pituitary gland, ovaries, testes, thyroid and adrenal glands.

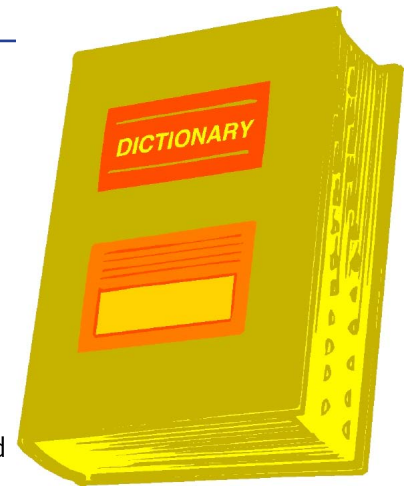
Gastroenterology: The study and treatment of conditions of the digestive system. A gastroenterologist diagnoses and treats disorders of the stomach, intestines, bowels and other structures, such as the liver, gall bladder, pancreas and esophagus, and focus on maladies that include ulcers, jaundice, colitis, hepatitis and cancer.

Hematology: The treatment of blood and blood system diseases such as cancer, lymphoma, serious anemia, and sickle cell disease.

Infectious Disease: The treatment of the disease process dealing with the suppression of the immune system.

Internal Medicine: A broad-based medical field in which physicians rely on their knowledge of major organs to diagnose and treat patients. Internists treat a variety of afflictions, from colds and heart problems to infectious diseases. Internists often serve as a patient's primary doctor, coordinating that person's healthcare.

Medical Oncology: Medical oncologists are specialists in using various medications to treat and manage patients with cancer. This includes the use of chemotherapy to kill cancer cells, painkillers to manage cancer pain, and drugs that will eliminate or reduce the side effects of cancer treatment.



Neonatal-Perinatal Medicine: A field of medicine devoted to the care and treatment of infants up to six weeks old. Neonatologists concentrate on the full spectrum of medical problems that can affect newborn babies. Perinatology is a branch of medicine dealing with medical and biological issues that affect the birth of a child. Perinatology combines obstetrics, gynecology and neonatology, and includes treatment of a fetus or a newborn and the mother.

Nephrology: The study and care of the kidneys and urinary system such as kidney disorders, diabetes, and renal failure. Treatments can range from dialysis to kidney transplants.

Neurology: The study and treatment of diseases of the nervous system. A neurologist assists patients who have stroke complications, head injuries, epilepsy, Alzheimer's disease, and other afflictions of the brain and spinal cord.

Obstetrics and Gynecology: OB/GYN is the field of medicine devoted to conditions specific to women. Obstetrics is the care of a woman during pregnancy and during and after childbirth. Gynecology is the study and care of the female reproductive system. An OB/GYN specialist combines these two disciplines to provide comprehensive care for women.

Ophthalmology: The medical specialty devoted to care of the eye and the treatment of diseases that affect eyes and vision. An ophthalmologist diagnoses and treats abnormalities of the eye and performs surgery on the eye. Ophthalmologists are medical doctors and are different from optometrists (who test vision and prescribe corrective lenses) and opticians (who make or sell corrective eyewear).

Orthopedics: The treatment of deformities, diseases and injuries of the bones, joints and muscles. Sports medicine is a subspecialty.

Orthopedic Surgery: Orthopedic surgery is the branch of surgery concerned with acute, chronic, traumatic, and overuse injuries and other disorders of the musculoskeletal system. Orthopedic surgeons address most musculoskeletal ailments including arthritis, trauma and congenital deformities using both surgical and non-surgical means.

Otolaryngology (Ear, Nose, and Throat): A division of medical science that focuses on the ears, nose and throat (ENT). Otolaryngologists diagnose and treat disorders from the shoulders up, with the exception of the eyes and brain. Conditions they may deal with include hearing loss, tonsillitis and nasal obstructions.

Pathology: A pathologist examines body tissues to diagnose of diseases, and to determine the cause of various conditions, including death. There are several subspecialties in pathology, including chemical pathology, forensic pathology, hematology pathology and neuropathology.

Pediatric Cardiology: The prevention, diagnosis and treatment of heart disease in children.

Pediatric Hematology-Oncology: The treatment of blood and blood system diseases in children such as cancer, lymphoma, serious anemia, and sickle cell disease.

Pediatrics: The field of medicine dedicated to the care of infants, children and teenagers, and they concentrate on preventing illness and treating children for a variety of conditions.

Podiatry: The study, prevention, and treatment of problems of the foot. A podiatrist may prescribe corrective devices and medication, or recommend physical therapy. Podiatrists attend colleges of podiatric medicine and graduates are doctors of podiatric medicine (DPM). Podiatrists with advanced training also do various types of foot surgery.

Psychiatry: The diagnosis, treatment, and prevention of mental, emotional, and behavioral disorders. Psychiatrists are physicians who prescribe appropriate medication and do therapy to treat of a variety of conditions, from depression to schizophrenia.

Pulmonary Disease: The field of medicine devoted to the study and treatment of diseases of the respiratory system such as pneumonia, bronchitis, emphysema, asthma, cancer and other disorders of the lungs and respiratory system.

Radiation Oncology: Radiation oncology is the field of medicine that uses therapeutic applications of radiation to manage cancer and other diseases. Radiation oncologists determine the type of radiation that will be used, as well as the amount or dose, and the number and length of treatments.

Radiology: The use of radioactive equipment, including X-ray machines, to diagnose and treat diseases and injuries. Specialists in this field are called radiologists.

Rheumatology: The study and care of the joints and the muscular and skeletal systems. Rheumatologists treat a range of conditions, from athletic injuries to arthritis, lupus and rheumatic fever.

Surgery: A wide range of surgical procedures including the use of minimally invasive surgical techniques. Surgical intervention or treatment of injuries and disease responsive to operative or manual treatment

Surgery - Cardiovascular: Highly trained and certified cardiac surgeons correct and repair multiple heart conditions, including coronary artery disease and congenital heart disease. Many cardiac surgeons specialize in minimally invasive surgeries that are performed through a small incision and require less recovery time and improve patient safety and comfort.

Surgery - Plastic: The repair, restoration, or reconstruction of different parts of the body. Plastic and reconstructive surgeons not only perform elective cosmetic surgery to improve appearance, they also repair and reconstruct the facial features and bodies of patients with conditions caused by burns, injuries, diseases and congenital deformities.

Surgery - Vascular: Surgical solutions to diseases of the body's blood vessels, including the heart and lymph systems. Vascular surgeons treat patients for lymphatic diseases, strokes, aneurysms, varicose veins and other conditions.

Urology: The study and treatment of the male and female urinary tracts and the male genital tract. Urologists diagnose and treat disorders of the urinary tract, prostate and bladder.

Information provided in this booklet was taken from a variety of sources, including the following:

www.explorehealthcareers.org

www.bls.gov/

