

## **GLOBAL HEALTH**

<https://explorehealthcareers.org/career/public-health/global-health/>

International/global health addresses the health of people living in low- and middle-income countries (sometimes known as developing countries). Many times, it also includes the health of displaced or traveling populations. Health concerns in these populations include not only infectious and tropical diseases (such as HIV/AIDS, tuberculosis, sexually transmitted diseases and malaria), but also chronic and non-infectious diseases. The field of global health addresses all the same public health issues that are domestic health concerns, like mental illness, trauma, gender-based violence, age-related illnesses and conditions. However, the solutions to these issues must be innovative to address unique challenges with international populations.

For example, maternal and child health is a high priority for global health professionals. This is because so much of the avoidable morbidity/mortality in the developing world is attributable to a lack of access to good prenatal and obstetric care and/or to preventable or treatable childhood illnesses, such as diarrhea and respiratory infection.

Organizations working globally also prioritize finance and management in health service systems and the programs they develop. This aids in developing countries establishing and implementing infrastructure that is sustainable, effective, and efficient for improving health outcomes.

## **NUTRITION DIETETICS**

<https://explorehealthcareers.org/field/nutrition-dietetics/>

The food we eat has a significant impact on our health, according to a number of scientific studies. Changes in diet can help prevent or control many health problems, including obesity, diabetes and certain risk factors for cancer and heart disease.

Dietetics is the science of how food and nutrition affects human health. The field of dietetics has a strong emphasis on public health and a commitment to educating all Americans about the importance of making proper dietary choices.

Dietitian nutritionists use nutrition and food science to help people improve their health. Nutrition and dietetic technicians work with dietitian nutritionists to provide care and consultation to patients. Both dietitian nutritionists and nutrition and dietetic technicians may also provide general nutrition education. Both are nationally credentialed and are an integral part of health care and foodservice management teams.

Professionals in the field of dietetics often focus their efforts on specific populations, facilities or initiatives, including:

- Designing individual nutritional therapies to address specific health issues, such as unhealthy weight, diabetes or hypertension
- Developing facility-wide nutrition programs for health care, educational, correctional and other institutions
- Increasing public awareness of proper nutritional standards and habits
- Improving the accuracy and comprehension of food labels
- Ensuring the safety of our food supply
- Researching how changes in diet (such as reducing salt intake) affect health (by reducing blood pressure)
- Working with food manufacturers to improve the nutritional quality of prepared foods

The Bureau of Labor Statistics projects that employment for dietitian nutritionists will grow 16% from 2014 to 2024, much faster than the average for all occupations. It notes that the role of food in good health is well known, leading to a larger role for dietitian nutritionists and nutrition and dietetic technicians in patient care and to advise people who want to improve their health.

### **Learn More**

- [Get answers to your questions about a career in dietetics.](#)

The [Academy of Nutrition and Dietetics](#) reviewed this overview.

## **BIOSTATISTICS**

<https://explorehealthcareers.org/career/public-health/biostatistics/>

Biostatistics is the science that applies statistical theory and mathematical principals to research in medicine, biology, environmental science, public health and related fields. Public health biostatisticians use mathematical and scientific methods to determine the cause of disease and injuries, to identify health trends within communities, and to evaluate programs. For instance, if you go into this career, your research may include estimating the number of deaths from gun violence or analyzing trends in drunk driving injuries. Other examples of using statistical methods in public health could be:

- Analyzing the effectiveness of new drugs in comparison to current treatments
- Determining the relation of specific risk factors to a disease or other health outcomes
- Explaining the probability of biological phenomena and health outcomes
- Evaluating health programs

If you like collecting and studying information, forecasting scenarios and drawing conclusions, this may be the perfect health career for you. This career is in high demand and provides individuals with a wide range of career opportunities. If you are interested in exploring multiple facets of public health in your career you could end up in an academic or clinical setting or as a private consultant with this degree.

## **OCCUPATIONAL THERAPY**

<https://explorehealthcareers.org/career/occupational-therapy/occupational-therapist/>

Occupational therapists help people of all ages to fully engage in their daily lives, from their work and recreation to activities of daily living like getting dressed, cooking, eating and driving.

If you choose this field, there are many kinds of practice available for you to specialize in. You may decide to work with premature babies at a pediatric hospital or children with cerebral palsy or Down syndrome. Many practitioners choose to help children thrive in the “occupations” of childhood, which include learning, playing and growing.

Therapists also work in schools with students who have learning disabilities or behavioral problems. Or you may be interested in working with older people in their homes or nursing homes, helping them to recover from strokes or deal with Alzheimer’s disease. Some practitioners choose to help accident victims to regain needed skills or offer assistance to people with mental illness.

There are new specialties too, like training workers to use the correct ergonomics, helping people with low vision maintain their independence, making buildings and homes more accessible, evaluating and training older drivers and promoting health and wellness.

## **PROSTHETICS & ORTHOTICS**

<https://explorehealthcareers.org/career/orthotics-prosthetics/orthotist-and-prosthetist/>

People lose limbs or suffer orthopedic impairment for many reasons, including accidents, combat injuries, birth defects and disease. Health care workers who specialize in orthotics and prosthetics (O&P) help these patients regain their mobility by fitting them with artificial limbs (prostheses) and orthopedic braces (orthoses).

At the highest level, O&P practitioners perform a detailed assessment to determine the patient's O&P needs and assess the patient's functional status, including muscle development, gait, sensory function, range of motion, joint stability and skin integrity.

O&P Practitioners also:

- Develop a plan that addresses the patient's needs and goals, including pain reduction, comfort, stability and mobility, as well as aesthetics.
- Select the appropriate design, materials and components for optimum strength, durability and function.
- Discuss the treatment plan, including benefits, risks and time involved.
- Prepare the patient for the device, with the use of splints or compression garments, as needed.
- Take measurements, make impressions and develop templates as needed to accurately fit the device.
- Fabricate/assemble the device and assess and properly align it for maximum function and comfort.
- Explain how to use and maintain the device.
- Provide ongoing care, including evaluation and modification of the device for optimal fit and function.

This fascinating field encompasses a variety of specialized careers, each of which contributes to designing, making, fitting, modifying, repairing and maintaining O&P devices that make an immeasurable impact on an individual's quality of life:

- Pedorthists make and/or modify footwear—including shoes, foot orthoses and other pedorthic devices to help people maintain or regain mobility.
- Certified fitters are trained and qualified to participate in the fit/delivery of prefabricated orthotic devices/soft goods (orthotic fitter); breast prostheses and mastectomy products/services (mastectomy fitter); or non-custom therapeutic shoes and diabetic multi-density inserts (therapeutic shoe fitter).
- Certified technicians work with O&P practitioners to fabricate, repair and maintain O&P devices using highly specialized materials and equipment to provide maximum fit, function and aesthetics. They do not provide direct patient care.
- Certified assistants help O&P practitioners with patient management as well as with the fabrication, fit and maintenance of O&P devices.

Many people enter this field because they or someone they know has benefited from a prosthetic or orthotic device. It is extremely rewarding to watch someone with a severe impairment regain

lost abilities and enjoy new independence. Advances in technology, such as microprocessors, myoelectric joints and computer imaging, make this a particularly exciting time to be involved in O&P.

## Working Conditions

O&P professionals work in private practice, hospitals, rehabilitation centers, specialty clinics and laboratories devoted to the fabrication, modification and repair of O&P devices.

This profession offers a variety of exciting employment opportunities available including O&P practitioners, pedorthists, assistants, fitters, and technicians.

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## Salary Range and Outlook

The U.S. Department of Education lists O&P training as a “national priority with a practitioner deficit.” The need for O&P services is rising rapidly, due in part to increasing obesity, diabetes and an aging population. The ability to provide the most cost-effective and clinically appropriate O&P care will be dependent on having a large enough pool of well-educated certified orthotists and prosthetists.

According to the 2013 American Orthotic and Prosthetic Association (AOPA) Benefits & Compensation Report, average compensation (base salary, bonus and commission) for the following job titles is:

- \$95,332 for a certified orthotist/prosthetist with an average of 18 years’ experience
- \$50,916 for a certified pedorthist with an average of 15 years’ experience
- \$49,047 for a certified technician with an average of 15 years’ experience
- \$49,564 for a certified assistant with an average of six years’ experience
- \$38,677 for a certified fitter with an average of seven years’ experience
- \$33,908 for a National Commission on Orthotic and Prosthetic Education (NCOPE) resident with an average of one year of experience

Compensation varies based on many factors, e.g., geographical location, years of experience and inclusion or exclusion of fringe benefits.

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## Academic Requirements

Training requirements vary depending on the type of orthotics and prosthetics (O&P) career you choose:

- [Assistants](#)
- [Fitters](#)
- [O&P practitioners](#)
- [Pedorthists](#)
- [Technicians](#)

Aspiring orthotists and prosthetists must complete an O&P masters program. O&P masters students come from a wide variety of undergraduate majors, but keep in mind that all O&P masters programs will have prerequisite courses. These may vary from program to program, but will likely include biology with lab, chemistry with lab, physics with lab, psychology, statistics, and human anatomy and physiology.

To become certified, candidates must sit for their [certification exam](#) after they complete a program [accredited by the Commission on Accreditation for Allied Health Education](#) (CAAHEP) and a one-year residency per discipline.

## Learn More About a Career as an Orthotist and Prosthetist

- Watch this [video profile of orthotists and prosthetists](#), which is located in the Health Science category.

## Resources

- [American Academy of Orthotists and Prosthetists](#)
- [American Board for Certification in Orthotics, Prosthetics & Pedorthics \(ABC\)](#)
- [American Orthotic & Prosthetic Association \(AOPA\)](#)
- [National Association for the Advancement of Orthotics and Prosthetics](#)
- [National Commission on Orthotic and Prosthetic Education \(NCOPE\)](#)

*The American Academy of Orthotists and Prosthetists reviewed this career profile.*