Public health professionals analyze and develop programs that protect the health of individuals, families and communities in the United States and abroad. Using education, development of healthy lifestyles, research and program implementation, public health professionals are agents for disease prevention and health promotion.

Experts in maternal and child health focus on the complex public health problems affecting women, children and their families. Maternal and child health professionals provide information and access to sexual reproductive health services and methods of family planning, promote the health of pregnant women and their children and increase vaccination rates.

Maternal and child health specialists work to improve the health delivery system through advocacy, education and research. They accomplish this by discovering and testing solutions through applied research and by developing, implementing and/or evaluating health programs at the local, state, national and international levels.
Behavioral Science/Health Education
https://explorehealthcareers.org/career/public-health/behavioral-science-health-education/

With a career in behavioral science/health education, you help to improve public health by encouraging healthy lifestyles through behavior change and educational outreach. In health education, you could work on developing community-wide education initiatives on health topics such as nutrition or community fitness or create curriculum for training community health workers. Additional examples include:

- Educating young people to recognize and avoid the risky behavior of unprotected sex, alcohol and drug abuse
- Design health promotion programs for smoking cessation initiatives, water and sanitation projects and occupational safety courses
- Develop programs for prescription adherence in the elderly population
- Research self-care practices and behavioral barriers to care to better understand a community’s participation with the health care system
Epidemiology
https://explorehealthcareers.org/career/public-health/epidemiology/

Epidemiology is the study and control of disease or injury patterns in human populations. When food poisoning or an influenza outbreak attacks a community, epidemiologist or “disease detectives”, are asked to investigate the cause of disease and control its spread. Epidemiologists work at all stages of the outbreak with other public health practitioners to identify and stop the outbreak.

Epidemiologists do fieldwork to determine what causes disease or injury, what the risks are associated with health outcomes, what populations are at risk, and how to prevent further incidences of a disease, behavior, or transmission. They consider the demographic and social trends of populations in relation to a disease and injury. Epidemiologists are often credited with the initial discovery and containment of an outbreaks, such as avian flu or mad cow disease.

Professionals in this field use statistical analysis through a distinctively different approach and methodology than what biostatisticians, Epidemiologists consider various hereditary, behavioral, environmental and health care factors. They also work extensively with other professionals working in the contributions of biological, clinical and other sciences, this can even include field techniques derived from biochemistry and molecular biology.
Neonatology is the medical specialty of taking care of newborn babies, sick babies, and premature babies. The word "neonatology" is stuck together from several root words and basically means "science of the newborn" -- "neo" = new, "natal" = birth, "ology" = science of. A neonatologist is a doctor that specializes in the field of neonatology. So... "Neonatologist" is basically a fancy technical term for "baby doctor."

A Neonatal Intensive Care Unit (NICU) is a special area of the hospital that is devoted to the care of critically ill babies. Typically a NICU is completely separated from the nursery for healthy newborns, and may not even be in the same building (the nursery is always located near the rooms for the mothers). The staff for the NICU and the staff for the newborn nursery are completely separate as well.

In most hospitals, babies are only admitted to the NICU directly from the delivery room, the newborn nursery, or from another hospital's NICU or nursery. For reasons of infection control, if a baby has gone home and then gotten sick and come back to the hospital, the baby will probably be admitted to a pediatric ward or pediatric intensive care unit rather than the NICU. Of course, exceptions can be made if the baby has a problem that definitely requires the constant attention of a neonatologist.

Babies usually stay in the NICU until they are ready to go home, even if that takes several months. This is much different than an adult or pediatric intensive care unit, where the patient will leave the unit as soon as they are stable and do not need help with their breathing and constant monitoring. For this reason, NICUs are often divided by walls or partitions into several distinct regions: a true "intensive care" area where the nurses and doctors spend most of their time at the babies' bedsides, an "intermediate care" area for babies that are still on IVs or extra oxygen, and a quieter area for the "growers."
Physical Therapy
https://explorehealthcareers.org/career/physical-therapy/physical-therapist/

Physical therapists are evidence-based, health care professionals who diagnose and treat individuals of all ages who have medical problems or other health-related conditions that limit their abilities to move and perform functional activities in their daily lives. They offer cost-effective treatment that improves mobility and relieves pain, reduces the need for surgery and prescription drugs, and allows patients to participate in a recovery plan designed for their specific needs. In addition, physical therapists work with individuals to prevent the loss of mobility before it occurs by developing fitness and wellness programs for healthier and more active lifestyles.

Physical therapists provide care for people in a variety of settings, including hospitals, private practices, outpatient clinics, home health agencies, schools, sports and fitness facilities, work settings and nursing homes. State licensure is required in each state in which a physical therapist practices.

As essential participants in the health care delivery system, physical therapists assume leadership roles in rehabilitation, prevention, health maintenance and programs that promote health, wellness and fitness. Physical therapists also play important roles both in developing standards for physical therapy practice and in developing health care policy to ensure availability, accessibility and optimal delivery of health care services.