As the world becomes more interconnected, our communities and populations face increasingly complex health challenges emerging through the interaction of individual vulnerability and behavior, cultural and social factors, environmental and geographic influences, as well as economic and political dynamics. Addressing these public health challenges requires innovative approaches arising from multiple disciplines.

According to the Association of Schools & Programs of Public Health (ASPH) (http://aspph.org/discover), public health is the science and art of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention. Public health helps improve the health and well being of people in local communities and around the globe. Public health works to prevent health problems before they occur.

Core Areas of Public Health

While public health is defined in many different ways, the following is a list of core areas that are often associated with public health. For more information, visit the What is Public Health? (http://aspph.org/study) site.

- **Biostatistics**: Statistical science applied to health and biomedical data.
- **Environmental health**: The impact of air, water and the built environment on health.
- **Epidemiology**: The study of the frequency, distribution and determinants of disease.
- **Health administration and management**: Managing human and fiscal resources to deliver public health services.
- **Global health**: Addressing health challenges across the world.
- **Maternal and child health**: Improving the health of women, children and their families.
- **Nutrition**: How food and nutrients impact the health of populations.
- **Public health laboratory practice**: Diagnose, prevent, treat and control infectious disease.
- **Public health policy**: The role of policy and policy decisions on public health.
- **Public health practice**: Incorporating public health principles into clinical practice.
- **Social and behavioral science**: The study of social and behavioral determinants of health.

Certificate

- Public Health - Certificate (catalog.colorado.edu/undergraduate/colleges-schools/arts-sciences/programs-study/public-health/public-health-certificate)