

# Health

The domain of healthy populations includes health outcome measures of personal wellness, life expectancy and mortality, and physical and mental health conditions. This domain also incorporates lifestyle behavior and healthcare, all of which influences a population's health status. Food utilization (a part of food security) also falls into this domain because of its connection to healthy behaviors. Other outside influences such as environmental quality (e.g., clean air days, clean water, etc.) are captured through indicators of ecosystem services.

The connections between economic services and human health are so numerous and complex that an entire sub-discipline of economics, known as health economics, has emerged. Economic assessments of health-related interventions are critical to decision makers because expenditure on health care in the United States has outpaced the general rate of inflation (Meltzer 2001). Social services are also strongly tied to human health. Many large organizations within the U.S. government were formed to protect and enhance the health of the U.S. population, and several well-known private organizations such as the American Red Cross, United Way of America, and Ronald McDonald House Charities provide health-related services to populations in need.

## Relationship to the Environment:



Courtesy of iStockphoto

The impact of environmental quality and condition on human health is well known. Yet the connection between ecosystem services and human health and development is a relatively new field of study. McMichael et al. (2003) point out that climate change is known to have an adverse affect on human health and that an estimated 83% of medicinal goods have yet to be discovered and used for human benefit from tropical vegetation, much of which could be lost forever if biodiversity continues to decline. Ecosystem condition also has direct impacts on human health resulting from bacterial contamination, air pollution, and toxic algal blooms (Cox et al. 2003). Access to nature, even if only through a window view, provide restorative experiences that can improve psychological and

physiological health (Van Den Berg et al. 2007). Greenspace and connection to nature have been linked to healthy physical, cognitive, and behavioral development, especially in children and youth. For instance, sensory stimulation promoted positive healthy-related behaviors by affecting interpersonal processes among a group working in a community garden (Hale et al. 2011). Children and youth living in greener neighborhoods had lower BMI after 2 years, presumably due to increased physical activity or time spent outdoors (Bell et al. 2008). Children also see improvements in motor fitness, balance, and coordination when provided with a natural landscape for play (Fjortoft 2004). Lifestyle is responsible for the bulk of the current avoidable disease burden, making the impact of ecosystem services on healthy behaviors that much more important (de Hollander and Staatsen 2003).



Courtesy of Microsoft.com