

Population-Based Practice

A population is a collection of individuals who have one or more personal or environmental characteristics in common.

A **population-of-interest** is a population that is essentially healthy but who could improve factors which promote or protect health.

A **population-at-risk** is a population with a common identified risk factor or risk exposure that poses a threat to health.

Public health practice is population-based if it meets all the following criteria:

1. Guided by an assessment of population health status

These criteria cannot be emphasized enough. All public health programs are based on the needs of the community, which are determined through an assessment of the community's health status. As communities change, so do community needs. As community needs change, so should public health programs. This is one of the reasons that community assessment is so important. Public health departments need to assess the health status of populations on an ongoing basis, so that public health programs respond appropriately to new and emerging problems, concerns, and opportunities.

2. Focuses on entire populations possessing similar health concerns or characteristics

This means focusing on everyone who is actually or potentially affected by a health concern or who share similar characteristics. Population-based interventions are not limited to only those who seek service or who are poor or otherwise vulnerable. Population-based planning always begins by identifying everyone who is in the population-of-interest or the population-at-risk. For example, it is a core public health function to assure that *all* children are immunized against vaccine-preventable disease. Even though limited resources may compel public health departments to target programs toward those children known to be at risk for being under or unimmunized, the public health system remains accountable for the immunization status of the total population of children.

3. Considers the broad determinants of health

A population-based approach examines all factors that promote or prevent health. It focuses on the entire range of factors, which determine health rather than just personal health risks or disease. Examples of health determinants include income and social status, housing, nutrition, employment and working conditions, social support networks, education, neighborhood safety and violence issues, physical environment, personal health practices and coping skills, cultural customs and values, and community capacity to support family and economic growth.

4. Considers all levels of prevention, with a preference for primary prevention

“Prevention is anticipatory action taken to prevent the occurrence of an event or to minimize its effect after it has occurred” (Williams, & Highriter, 1978). Not every event is preventable, but every event does have a preventable component. Thus, a population-based approach presumes that prevention may occur at any point - before a problem occurs, when a problem has begun but before signs and symptoms appear, or even after a problem has occurred. **Primary prevention** promotes health, such as building assets in youth, or keeps problems from occurring, for example, immunizing for vaccine-preventable diseases. **Secondary prevention** detects and treats problems early, such as screening for home safety, and correcting hazards before an injury occurs. **Tertiary prevention** keeps existing problems from getting worse; for instance, collaborating with health care providers to assure periodic examinations to prevent complications of diabetes such as blindness, renal disease failure, and limb amputation. **Whenever possible, public health programs emphasize primary prevention.**

5. Considers all levels of practice

A population-based approach considers intervening at all possible levels of practice. Interventions may be directed at the entire population within a community, the systems that affect the health of those populations, and/or the individuals and families within those populations known to be at risk.

- **Community-focused practice** changes community norms, attitudes, awareness, practices, and behaviors of the population-of-interest.
- **Systems-focused practice** changes organizations, policies, laws, and power structures of the systems that affect health.
- **Individual/family-focused practice** changes knowledge, attitudes, beliefs, values, practices, and behaviors of individuals, alone or as part of a family, class, or group.

Interventions at each of these levels of practice contribute to the overall goal of improving population health status. No one level of practice is more important than another; in fact, most public health problems are addressed at all three levels, often simultaneously. Public health professionals determine the most appropriate level(s) of practice, based on community need and the availability of effective strategies and resources. Interventions at each of these levels of practice contribute to the overall goal of improving population health status. Public health professionals determine the most appropriate level(s) of practice, based on community need and the availability of effective strategies and resources.

Consider, for example, smoking rates that continue to rise among the adolescent population. At the community level of practice, public health professionals coordinate “youth led, adult supported” social marketing campaigns intending to change the community norms regarding adolescents’ tobacco use. At the systems level of practice, public health professionals facilitate community coalitions that advocate city councils to create stronger ordinances restricting over-the-counter youth access to tobacco. At the individual/family practice level, public health professionals teach middle school chemical health classes that increase knowledge about the risks of smoking, change attitudes toward tobacco use, and improve “refusal skills” among youth 12-14 years of age.