



PROMOTING POSITIVE ADOLESCENT HEALTH BEHAVIORS AND OUTCOMES

Thriving in the 21st Century

Adolescence is a period of immense growth, learning, exploration, and opportunity during which youth develop the knowledge, attitudes, and skills that will help them thrive throughout life. While most youth traverse adolescence without incident, some need additional support to promote their optimal health. Sometimes such support comes in the form of prevention or intervention programs designed to encourage healthy behaviors that will follow the adolescent through adulthood.

In this report from the National Academies of Sciences, Engineering, and Medicine, the expert committee uses an optimal health framework to (1) identify core components of risk-behavior prevention programs that can be used to improve a variety of adolescent health outcomes, and (2) develop evidence-based recommendations for research and the effective implementation of federal programming initiatives focused on adolescent health.

Two Prevention Models: The Public Health Prevention Framework and the Institute of Medicine Intervention Classifications

This brief describes two of the most commonly cited prevention models in the health promotion and prevention literature: the Public Health Prevention Framework and the Institute of Medicine (IOM) Intervention Classifications. These models are neither equivalent nor mutually exclusive, but rather provide two different ways of describing health promotion and prevention activities. In this brief, each of the models is defined followed by a description and illustration of their overlap, with the goal of dispelling the widespread confusion between these two models in the prevention research and practice fields.

Health Behaviors and Outcomes in Context: Examples of Adolescent Risk Behaviors

Alcohol use

Alcohol use during adolescence can have harmful effects on brain development, which has contributed to the adoption of laws regarding minimum legal drinking ages. However, simply telling youth not to drink alcohol (health behavior) will not prepare them to avoid impairment and injury (health outcome) once this behavior is socially sanctioned. Instead, youth need to learn about social norms related to drinking and how to make decisions about alcohol that can help prevent impairment or injury once their drinking behaviors are legal.

Sexual activity

Preventing an unintended pregnancy (health outcome) is an issue not unique to teens or unmarried people, as many people want or need to control their fertility after marriage. Therefore, an exclusive focus on teaching abstinence from sexual activity (health behavior) does not provide people with the necessary knowledge and skills to prevent an unintended pregnancy once they do have vaginal sex. Rather, targeting communication, decision-making skills, and family planning behaviors is more likely to be successful in preventing unintended pregnancy, not only during adolescence, but also across the life course.

Public Health Prevention Framework

The three-level Public Health Prevention Framework¹ is commonly used to discuss prevention activities in the field of public health. In this framework, **primary prevention** is focused on the risk factors for a disease or condition, with the intent of intervening before it occurs. Included in primary prevention are such interventions as vaccination and behavior change programs, both of which can prevent the onset or reduce the impact of a disease or condition. **Secondary prevention** focuses on early identification of high-risk populations, which can aid in slowing or stopping the progression of a disease or condition, and includes such strategies as early testing and monitoring for signs or symptoms of a disease or condition. Finally, **tertiary prevention** refers to treatment and rehabilitation after the onset or diagnosis of a disease or condition, which can prevent its future occurrence. Tertiary prevention activities may include chronic disease management programs and medication.^{2,3}

Health Behaviors vs. Health Outcomes

The Public Health Prevention Framework is designed with **health outcomes** (e.g., injury, unintended pregnancy) as the key target. Although a **health behavior** (e.g. alcohol use, sexual activity) can be an important predictor of a health outcome, behaviors are modifiable risk factors that are a focus in primary prevention activities and are distinguished from the health outcome itself.

This separation of health behaviors from outcomes is a subtle yet important part of the Public Health Prevention Framework. Behaviors can be difficult to prevent, and societal attitudes and beliefs about the acceptability of such behaviors as alcohol use and sexual behavior often change with age. Thus, focusing only on avoiding or discontinuing these behaviors does not prepare a person to avoid adverse health outcomes such as impairment or injury and unintended pregnancy once the behaviors are socially acceptable or age appropriate.

Institute of Medicine (IOM) Intervention Classifications

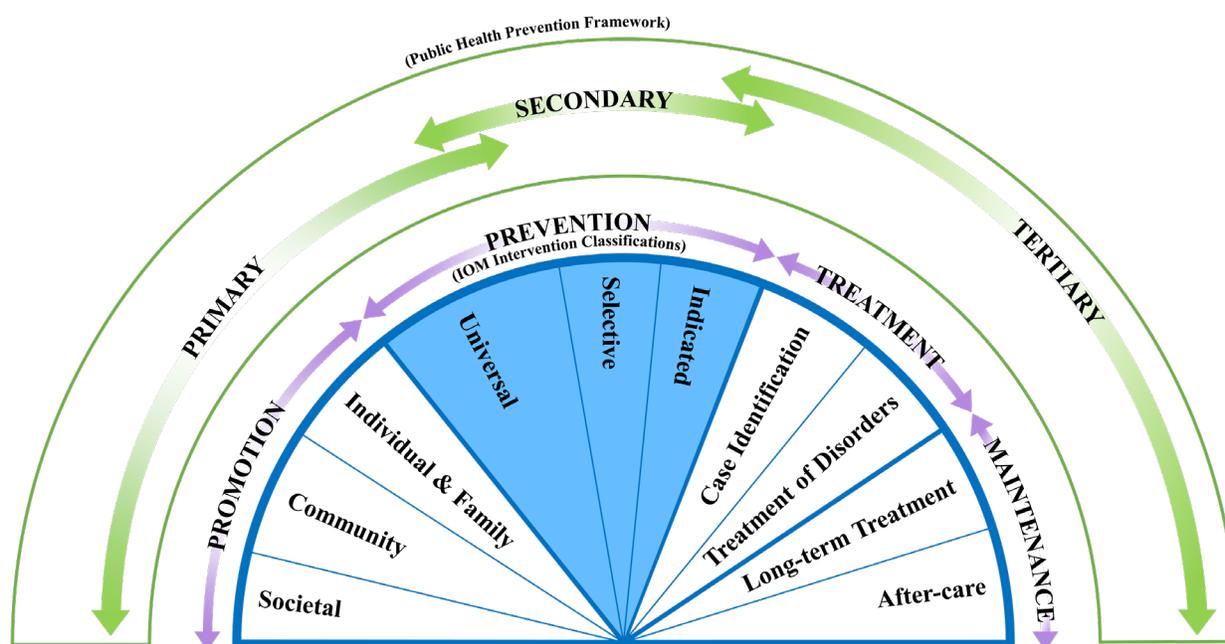
The IOM Intervention Classifications were first described in a 1994 IOM report⁴ on mental health disorders and were

based on the prevention model proposed by Gordon.⁵ The classifications include universal, selective, and indicated programs and interventions. **Universal** prevention programs and interventions, such as seat belt laws or immunization programs, target an entire population, regardless of its members' levels of risk. **Selective** programs and interventions target a subset of the population that may be considered at risk (e.g., mammograms for women with a family history of breast cancer). **Indicated** programs and interventions target those who are already beginning to experience the effects of a specific health outcome, such as medical control for someone with hypertension.

Overlap of the Two Prevention Models

Over time, researchers and practitioners have blended these two prevention models, often using the terms from these three-tiered models interchangeably. However, these models are not mutually exclusive, but rather provide two different ways of describing prevention activities.

This figure from the committee's recent report illustrates how these two prevention models overlap. The half-moon in the center of the figure represents a health promotion model that was published in the most recent update⁶ to the 1994 IOM report. In this model, prevention is distinct from promotion, treatment, and maintenance. In contrast, the Public Health Prevention Framework, shown on the outer ring, takes a broader approach whereby promotion, treatment, and maintenance are included among prevention activities. The overlapping arrows in the Public Health Prevention Framework represent how program recipients may be at different levels of risk for the targeted health outcome when they receive intervention services.



Overall, a better understanding of the similarities and differences between these two prevention models can provide researchers and practitioners with a consistent and specific vocabulary for describing programs and interventions, which will ultimately help decrease confusion in the prevention field.

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