Welcome to Module 1 of the Health Equity and Prevention Primer: Achieving Equity in Health and Safety Through Primary Prevention. Here we will set the stage for this online series and describe how a primary prevention approach leads to the goal of equity in health and safety.
Learning objectives:

- Define primary prevention, disparities and inequities;
- Identify examples of primary prevention strategies; and
- Discuss why primary prevention is key to achieving equity in health and safety outcomes.

Before we begin, let’s look at our learning objectives for this module. After completing Module 1, participants will be able to:

- Define primary prevention, disparities and inequities;
- Identify examples of primary prevention strategies; and
- Discuss why primary prevention is key to achieving equity in health and safety outcomes.
We define primary prevention as a systematic process that promotes healthy environments and behaviors and reduces the likelihood or frequency of an injury, condition, or illness occurring. When we engage in primary prevention, we take action to prevent problems from occurring in the first place.
Today, there’s a growing consensus that primary prevention is central to controlling health care costs, preventing disease and injury, and helping people live healthier lives. President Barack Obama declared that “…in the absence of a radical shift towards prevention and public health, we will not be successful in containing medical costs or improving the health of the American people.”
Historically, society’s response to illness and injury has focused on increasing the quality and availability of health care services. Despite these efforts, significant disparities in access and quality of health care abound. Health care promotes the health of our nation, and it is critical that all health care needs are appropriately met. But health care alone will not solve our nation’s health crisis and reduce inequities. We know that it generally treats one person at a time, and once they are already sick or injured. Health care also is not the primary determinant of health. A focus on preventing people from getting sick or injured in the first place is both economically and ethically sound.
Yet, figures indicate a severe imbalance in national expenditures between prevention and health care services. The diagram in the slide shows that behaviors and the environment account for seventy percent of the influence on health outcomes. 21st century medical care accounts for ten percent of the influence. Yet, ninety-six percent of the 2.2 trillion in national health expenditures in 2000 were spent on medical services, and only four percent were invested in prevention.
In the United States, heart disease, cancer, stroke, diabetes and injuries and violence are the five leading causes of death and conditions with high rates of disparities. These conditions disproportionately affect specific population groups, who experience higher rates of premature death and chronic conditions, and diminished quality of life and productivity. Significantly, these are all preventable.
According to a landmark study by McGinnis and Foege, we can link the leading causes of death to what they termed the “actual causes of death.” A rigorous examination of all death certificates from 2000 through 2004 determined that half of the deaths in the U.S. were premature and related to behaviors and exposures that are largely preventable. For instance, if heart disease was the condition, eating and activity patterns, tobacco, and alcohol use were the primary behaviors underlying heart disease. We can link the leading causes of death to exposures and behaviors, or their “actual causes of death.”
McGinnis and Foege’s research validated the fact that we must do more than medicate. In module two, we will describe the Two Steps to Prevention framework. The first step takes us from the health care response to examining the actual causes, meaning the exposure or behavior that caused the illness or injury. A second step leads us to explore the environment in which it occurred. Focused on the environment, our prevention efforts are able to reach a large number of people and get to the underlying causes of why people are getting sick or injured in the first place. Modules two and three will go into greater depth on specific elements of the environment, including the physical, socio-cultural and economic.
By addressing the physical environment, including what is sold and how it’s promoted, we can improve the health and safety of entire communities. High rates of chronic disease, for example, correlate with environments where there is a lack of healthy food options.
High rates of chronic disease also correlate with a lack of opportunities for activity. Physical activity is protective for a range of illnesses and injuries, and rates are influenced by the physical environment. Later, we will explore how such community conditions are shaped by other elements in the environment, such as racism, poverty and discrimination, which are systemically rooted in our society. Root factors such as these must also be addressed as we improve community conditions. Modifying the way that root factors play out to shape community conditions is an important part of reducing inequities.
Health Disparities:

*Differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States.*

In the United States there are enormous disparities in health and safety outcomes. The National Institutes of Health define health disparities as: “differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States.”
Further data and research on disparities reveal the systematic nature of the problem, and the impact of the environment in creating disparities. Patterns of disparities are indicative of an historical, and in some cases on-going, neglect or discrimination against certain groups of people.
Health Inequities:

Differences in health which are not only unnecessary and avoidable, but in addition, are considered unfair and unjust.

The term health inequity emerged in the literature and practice to deepen the definition of disparities. Health inequities are defined as “differences in health which are not only unnecessary and avoidable, but in addition, are considered unfair and unjust.” People working toward health equity maintain that all people have an equal right to the conditions and resources that assure optimal health and safety.
Primary Prevention Takes Us Upstream

To describe the opportunity of prevention, Gloria Steinem stated that, “We are still standing on the bank of the river, rescuing people who are drowning. We have not gone to the head of the river to keep them from falling in. This is the 21st century task.” The river represents the broader environment, where inequities lead to different population groups being more likely to fall into the river, and less likely to be saved from drowning. Primary prevention is moving upstream, getting to the root of the problem, and making sure that no specific groups are disproportionately likely to fall in. By looking upstream, we are led to the root factors behind inequities, such as discrimination and poverty, and the ways these play out to impact health and safety, including in the way they shape community conditions.
Primary prevention has saved lives, money, and improved quality of life for many. As listed on the slide, there are several examples of how primary prevention has significantly reduced illness and injury.
Motor vehicle crashes, for example, are one preventable cause of injury that primary prevention has addressed. Motor-vehicle related deaths are THE leading cause of death in the U.S. for people ages 1-34.
If you recall the McGinnis and Foege study, the behaviors underlying motor vehicle crashes are largely preventable.

How many deaths a year caused by motor vehicles crashes do you think could have been prevented?

a) 40,500  
b) 37,000  
c) 35,000  
d) 43,000

Click on the slide to see the correct answer.
d. 43,000

Source: Actual Causes of Deaths in the US, 2000, Centers for Disease Control and Prevention, 2004

The answer is 43,000.

And these 43,000 do not occur equally across the population. American Indians and Alaska Natives experience the highest rate of motor vehicle related injuries and death as compared to all other racial and ethnic groups.
The strategies used to prevent the effects of motor vehicle crashes lie along a continuum, with primary actions taking place before the onset of injury.

Traffic speed limits and mandatory seat belt and car seat laws were primary prevention examples.

Providing traffic school to law offenders and improving individual behaviors for greater safety was a secondary prevention response.

Medically treating crash victims to limit the severity of their injuries was a tertiary prevention response.

The Prevention Continuum is a framework for categorizing different prevention strategies with the goal of clearly distinguishing primary prevention from other types of strategies. All of these actions are necessary. But as a result of primary prevention actions to change the social and physical environment in which people get around, we have seen a significant reduction in injury and death caused by motor vehicle crashes. The National Highway Traffic and Safety Administration estimates that nearly 200,000 lives were saved due to mandatory seat belt and child restraint laws. Still, we have to do more. In the context of inequities, we must ensure that the benefits of primary prevention reach all communities.
Quality prevention efforts address the societal norms, environments and systems that cause inequities in illness and injury. Improving elements of the community environment, which are shaped by root factors such as racism and poverty, is one avenue for addressing inequities and an important part of the prescription for health equity. Module two will illustrate how the community environment, where people confront risks to their health and safety every day, creates inequities in illness and injury. Module three will explore eighteen factors divided into four interrelated clusters. These factors can promote equity in health and safety outcomes.
Quality prevention efforts must be comprehensive and include mutually supportive strategies to improve community conditions. In module four, we will introduce the Spectrum of Prevention. The Spectrum organizes prevention strategies into six levels, which when implemented together, can form a systematic approach. Modules five and six will go into further detail on the top three levels of the Spectrum, particularly the power of partnerships, and the importance of local policy.
Past public health successes have shown that we can shift societal norms towards better health and safety through a systematic primary prevention approach. Prevention advocates can improve policies, institutional practices and environments to catalyze norms change. Since norms can vary across income, culture, and other divides, appropriate and skillful action is needed to create a norms shifts towards equitable health and safety outcomes.
Health equity initiatives are gaining momentum around the country. The image above is from King County, Washington’s Equity and Social Justice Initiative. A comprehensive strategy such as this can ultimately shift norms in communities, institutions, businesses, and governments to support equitable health and safety outcomes.
If...we look at illness in a different way, we will see that the context of the illness is often the most important issue. To look at illness and ask...what are all the factors involved, is often tremendously complex. The community issues range from access to participation in the solution, from treatment programs to policy and from education to the use of specialists.

-Len Duhl, M.D.
UC Berkeley and UC San Francisco

The final module in this series, module seven, will introduce a range of community health indicators, and describe how we can evaluate our progress towards equity through our development of and progress on the indicators.
Public health departments have played and will continue to play a pivotal role in implementing both successful and equitably focused prevention strategies.

Dr. Adewale Troutman, Director of the Louisville Metro Public Health and Wellness, states that “our success will be measured by our ability to merge upstream and downstream approaches. If we don’t fix that upstream, we will never close the gap.”

This primer is designed to provide health departments and their partners with additional skills and resources to increase their capacity to eliminate inequities using a primary prevention approach.
Key Points in Module 1:

• The five leading causes of death are also conditions with high rates of disparities;

• The leading causes of death, illness and injury are largely preventable; and

• A focus on health care services alone cannot eliminate inequities.

To recap module one, we learned that:

• The five leading causes of death are also conditions with high rates of disparities;
• The leading causes of death, illness and injury are largely preventable; and
• A focus on health care services alone cannot eliminate inequities.
Primary prevention strategies should:

• Address the underlying reasons why people are getting sick and injured in the first place;
• Act at the population level by improving environments, including community conditions;
• Create equal opportunity

Adapted from: Life and Death From Unnatural Causes: Health & Social Inequity in Alameda County. Alameda County Public Health Department September 2008.

Moreover, primary prevention strategies should:

• Address the underlying reasons why people are getting sick and injured in the first place;
• Act at the population level by improving environments, including community conditions; and
• Create equal opportunity

As primary prevention is implemented, it proactively promotes equity by emphasizing those who need it most, and accelerating efforts in communities that have been historically disenfranchised.

The next module will go into more depth about the mechanisms through which inequities are created, and how we can begin to address them. When you are ready, please move on to module 2.