For the record, my name is Jennifer Stoll-Hadayia, and I am the Public Health Program Manager at the Washoe County District Health Department. In that role, I oversee the Washoe County Chronic Disease Prevention Program.

Outline

Today, I will be talking with you about:

- A problem: the burden of chronic disease in Washoe County;
- An opportunity, regarding the role of risk factors and a prevention-based approach to chronic disease; and
- A solution, in the form of the Washoe County Chronic Disease Prevention Program.

Chronic Disease Mortality in Washoe County

The Centers for Disease Control and Prevention (CDC) has called chronic disease an “epidemic of unparalleled proportion” as well as the most common and costly of all health problems facing our nation today. Washoe County has not been immune from this trend. Instead, data are indisputable regarding the toll that chronic diseases take on the Washoe County community.

To illustrate this point, the Washoe County District Health Department recently commissioned an analysis of mortality data from 2000 – 2002. It showed that nine of the 15 leading causes of death in Washoe County are a chronic disease, including heart disease, lung and breast cancer, and diabetes.

Chronic Disease Morbidity in Washoe County

Our study also examined the impact that chronic disease has on quality of life, using a measure called Years Lived with Disabilities (YLD). It showed that six of the 15 leading causes of disability in Washoe County are also chronic diseases.

The Total Burden of Chronic Disease in Washoe County

Our final analysis is a measure of the overall burden of disease in the Washoe County population, called Disability Adjusted Life Years (DALY), considered by data experts to be the most comprehensive measure of disease in a population. Once again, it showed chronic...
diseases at the top of the list; in this case, seven of the 15 leading disease burdens in Washoe County are chronic diseases.

**Chronic Disease Surveillance**

Data on chronic disease in Washoe County are drawn from a number of local, state, and national sources:

- Data on causes of death—or mortality—come from the CDC as well as the Nevada Interactive Health Database System;
- Data on disability come most often from commissioned analyses like the one I cited previously; and
- Data on risk behaviors come from national and state-level surveillance systems like the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Risk Behavior Surveillance (YRBS), conducted annually.

**Causes of Chronic Disease**

From such data sources, we know that chronic diseases are common in Washoe County and across the county, but what is contributing to these trends? In 2003, the CDC helped answer this question with the publication of a seminal document in the chronic disease field, entitled *The Power of Prevention: Reducing the Health and Economic Burden of Chronic Disease*. In it, they state:

- Three modifiable health-damaging behaviors—tobacco use, lack of physical activity, and poor eating habits—are responsible for much of the inordinate suffering and early death of millions of Americans. In fact, approximately 33% of all U.S. deaths in the United States can be attributed to these behaviors.²

**Causes of Chronic Disease in Washoe County**

Given this explanation, the health behaviors of Washoe County residents can easily explain the chronic disease burden there:³

- 22% of Washoe County residents are smokers;
- 16% of Washoe County residents engage in no leisure-time physical activity; and
- 76% of Washoe County residents do not eat enough fruits and vegetables

In the area of chronic disease, however, risk can also be opportunity. If tobacco use, physical inactivity, and poor nutrition are responsible for chronic disease, then quitting tobacco, being physically fit, and maintaining good eating habits can prevent chronic disease. In fact, research shows that:

- Increasing fruit and vegetable consumption reduces heart disease, some cancers, and diabetes;⁴
- Physically active people are less likely to develop heart disease than their physically inactive counterparts;⁵ and
- The risk for heart disease is reduced by half, after only one year of quitting smoking.⁶

**An Opportunity for Prevention**
Although this equation is simple, it hasn’t always been the focus of our health system in regards to chronic disease. Again, in the *Power of Prevention*, the CDC observed:

- Despite the evidence that prevention works, the focus in our health care system over the past century has not been on prevention of chronic disease, but on treatment of short-term, acute health problems. As a nation, we have emphasized expensive cures for disease rather than cost-effective prevention.⁷

**The Washoe County Chronic Disease Prevention Program**

In Washoe County, our efforts to prevent and control chronic disease model the CDC’s recommendation. Washoe County’s program is summarized in our Strategic Plan ([http://www.gethealthywashoe.com/files/packet.pdf](http://www.gethealthywashoe.com/files/packet.pdf)) and key details are described below.

**A Prevention Approach**

At the heart of Washoe County’s program, is a prevention approach. In this approach, we implement cost-effective, evidence-based prevention strategies aimed at reducing the risk factors of tobacco use, physical inactivity, and poor nutrition. This, in turn, reduces all chronic diseases:

![Diagram showing the prevention approach]

**Prevention Strategies**

Washoe County’s Program maintains five prevention strategies:

- Initiate collaboration with community members, coalitions, and stakeholders;
- Educate the public effectively about chronic disease and their risk factors;
- Enact and support policies that promote healthy environments;
- Promote health and wellness programs at schools, worksites, and other community settings; and
- Conduct ongoing and reliable evaluation.

**Chronic Disease Indicators**

In order to assess the impact these strategies have on risk factors in Washoe County as well as on the burden of chronic disease, it is essential to monitor pertinent health indicators. In our program, we monitor:
• Healthy People 2010;
• National CDC indicators; and
• Relevant Nevada state health plans in areas such as diabetes, comprehensive cancer, obesity, and tobacco.

Chronic Disease Indicators in Washoe County

Some of the chronic disease indicators that Washoe County is tracking include those related to nutrition and physical activity, such as:

• Percentage of adults who consume at least five fruits and vegetables a day;
• Percentage of adults who meet the recommended guidelines for moderate physical activity; and
• Percentage of adults who meet the recommended guidelines for vigorous physical activity.

As well as those related to tobacco use and exposure, such as:

• Percentage of adults who smoke;
• Percentage of 18-24 year-olds who smoke; and
• Exposure to secondhand smoke.

Examples of Chronic Disease Prevention in Washoe County

In particular, two of Washoe County’s program activities exemplify the cost-effective prevention-based approach espoused by the CDC. The first is our Get Healthy Washoe social marketing campaign; we call this an “umbrella” campaign because several activities take place under the umbrella moniker of Get Healthy Washoe. The campaign includes prevention messaging, a website, educational materials, and a community presence in the form of health fairs and events. Get Healthy Washoe can be viewed at www.gethealthywashoe.com.

The second program example is the Washoe County Chronic Disease Coalition. Comprised of 71 members, representing 39 agencies, the Coalition is another type of “umbrella;” this time, an umbrella organization for diverse and nontraditional partners to work together on the common mission of preventing chronic disease. Together, the Coalition promotes a chronic disease prevention message – Small Changes to a Healthier You – and conducts community initiatives on workplace wellness, access to chronic disease care, data, and public education.

These examples – and the vast majority of Washoe County’s other chronic disease activities – are supported through limited-term grant funding. With such limited resources, the impact of our efforts will be commensurately limited. Though we are seeing some indications that our efforts are helping to reduce chronic disease in Washoe County, additional resources will ultimately be needed to achieve the greatest impact in our community.

Closing

In closing, I would like to acknowledge that publicly-funded health care for chronic disease is a vital service in our community; there is no doubt that lives are saved every moment through medication, surgery, and other chronic disease treatments. However, it is also the responsibility of the public health system to take all measures possible to prevent disease before such remedies are necessary. Simply put, we must do all we can to keep our communities well. As
this final quote from CDC explains, prevention and care must occur hand-in-hand if we are to tackle the chronic disease epidemic that is before us:

- Many Americans could enjoy 5–7 additional years of healthy life and avoid the costs associated with chronic disease if we improve access to quality health care services, emphasize healthy behavior, and focus on broad policies and strategies that offer the greatest good for the greatest number of people at the lowest cost. 

I thank you for your time today, and I would be happy to answer any questions you may have.

References

2 Ibid, pg. 5.
7 Ibid, pg. 7.
8 Ibid, pg. 7.