



September | **2014**

*Updated September 2015*

# The Implications of Chronic Disease and How National Organizations Can Aid Local Prevention Efforts

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**A White Paper from the National Association of Chronic Disease Directors—Healthy Communities**

*This document was made possible through the support provided by the cooperative agreement U58/CCU324336 from the Centers for Disease Control and Prevention.*

# The Implications of Chronic Disease and How National Organizations Can Aid Local Prevention Efforts

*A White Paper from the National Association of Chronic Disease Directors (NACDD)*

**Chronic diseases affect people of all ages, and disproportionately affect people belonging to different races/ethnicities, people of different incomes and social classes, and people of various sub-population groups.** It is no secret that chronic conditions and diseases account for most of the country's healthcare costs and are the leaders in limitations of daily functions and activities by those who are affected by them.

## What the Numbers Say about Chronic Diseases...

- Chronic diseases affect nearly 50% of all Americans and now account for seven of the 10 leading causes of death in the US.<sup>1, 2, 3</sup>
- Heart disease and stroke account for more than 30% of US deaths each year.<sup>3</sup>
- Cancer claims more than 500,000 lives each year.<sup>3</sup>
- An estimated 66% of US adults are overweight/obese; and nearly 20% of youth ages 6-19 are obese.<sup>3</sup>
- About 26 million Americans have diabetes, and another 79 million are said to have prediabetes.<sup>4</sup>
- Diabetes is the leading cause of kidney failure, lower extremity amputations, and new cases of blindness

## The Implications of Chronic Diseases are Costly

- One out of every five US healthcare dollars is spent on caring for people who have been diagnosed with diabetes.<sup>1</sup>
- Annually, healthcare costs are \$2,000 higher for smokers, \$1,400 higher for people who are obese, and \$1,600 higher for people with diabetes than for non-smokers, or people who are not obese or do not have diabetes, respectively.<sup>1</sup>
- Of the estimated \$2.7 trillion in healthcare spending each year, more than 75% of such costs are due to treatment of chronic conditions.<sup>2</sup>
- Healthcare costs are five times higher per year for people with chronic conditions than for people without chronic conditions.<sup>2</sup>
- Cardiovascular diseases alone accounts for nearly 20% of medical expenses and 30% of Medicare expenses.<sup>1</sup>
- Use of tobacco products accounts for 11% of Medicaid costs and 10% of Medicare costs.<sup>1</sup>
- Asthma, high blood pressure, obesity, and smoking can reduce the annual productivity of an employee by \$200-\$440 per person.<sup>1</sup>
- Workers with diabetes average two more work days absent per year than workers without diabetes.<sup>1</sup>

each year for US adults ages 20-74.<sup>3</sup>


- Arthritis is the most common cause of disability, limiting activity levels for 19 million US adults.<sup>3</sup>
- Approximately 1/4<sup>th</sup> of people living with a chronic condition experience significant limitations in daily activities.<sup>3, 4</sup>
- The percentage of US children and adolescents with a chronic health condition has increased from 1.8% in the 1960's to more than 7% in 2004.

**Even more astounding is the new prediction that children born today will be the first generation in over two centuries to live shorter lives than their parents.**<sup>4</sup>

### **Preventable Behaviors...**

**While chronic conditions are the most common and costly of all health problems, they are also the most preventable.**<sup>3</sup> The three most damaging-but-modifiable risky behaviors that lead to onset of these diseases involve unhealthy eating, physical inactivity, and use of tobacco products.<sup>3</sup> It is these three behaviors that are responsible for much of the country's illness, disability, and premature death.

- Just 24% of US adults and even less high school students eat the recommended five or more servings of fruits and vegetables per day.<sup>3</sup>
- More than 60% of US children and adolescents eat more than the recommended daily amount of saturated fat.<sup>3</sup>
- More than 1/3<sup>rd</sup> of US adults participates in the minimum physical activity standards; and only 1/3<sup>rd</sup> of US high school students participates in daily physical education classes.<sup>3</sup>
- An estimated one in five US adults and one in five high school students smoke.<sup>3</sup>



**"Today, only \$.03 of every \$1 spent on healthcare goes towards public health and prevention."**  
*(National Business Coalition on Health)*

### **Why Prevention of Chronic Diseases Is the "Best Buy in Health"...**

The rising healthcare costs and prevalence of chronic diseases contributes to substantial economic burdens. It is the role of public health to realign the healthcare system and create coordinated,

strategic approaches to prevent chronic diseases in efforts to lower the staggering healthcare costs associated with managing and treating these conditions.<sup>2</sup>

**Chronic disease prevention policies and programs have been shown to be cost-effective, improve productivity, and reduce healthcare costs.** Here are some examples:<sup>1</sup>

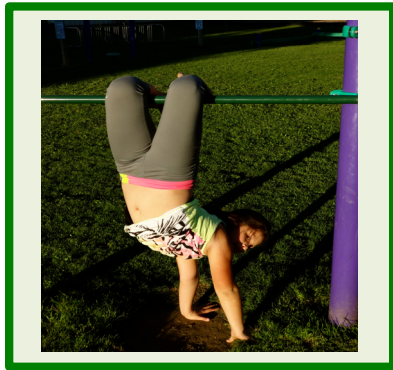
- Participation in a proven diabetes prevention program may save associated economic costs in as soon as three years.<sup>1</sup>
- Just a five percent reduction in hypertension prevalence would save \$25 billion over five years.<sup>1</sup>
- Medical costs are reduced by \$3.27, and absenteeism costs are reduced by \$2.37, for every \$1 spent on workplace wellness programs.<sup>1</sup>
- The Milken Institute suggests that a modest reduction in avoidable risk factors could lead to a gain of more than \$1 trillion annually in labor supply and efficiency by 2023.<sup>1</sup>
- For every \$1 spent on prevention, an estimated \$5.60 is saved in healthcare spending, leading to \$16 billion in savings within five years.<sup>2</sup>

## Healthy Communities...

**Health promotion and prevention of chronic diseases can no longer be limited to a doctor's office.** Building safe and healthy community environments, empowering people to make healthy choices, expanding prevention services and access to resources in community and clinical settings, and removing disparities of all types **has to occur in the local community setting and involve a multi-sector and multi-disciplinary approach.**

### Local Communities

Community-based public health efforts can have a tremendous return on investment (ROI) in terms of saving lives, reducing diseases and injury, and curbing healthcare spending.<sup>2</sup> In recent years, chronic disease prevention efforts have heavily focused on sustainable policy, system, and environmental (PSE) interventions that increase access and opportunities for people to eat healthy, engage in physical activity, and refrain from access to (and use of) tobacco products.<sup>3</sup> PSE interventions further allow individuals to sustain healthy habits since these interventions target societal and physical environments.<sup>5</sup> **Once these changes take place, they become rooted in the community and can influence the behaviors of its members for many years to come.**



*Installation of outdoor fitness equipment, creation of a community garden, and posting of tobacco-free signage at a local youth center are examples of PSE changes now in place at a local youth center in Salamanca, NY.*

Even more recent is a newer focus on improving access to preventive services and care by strengthening community and clinical linkages (CCL) so that people living with one or more chronic diseases can better manage their conditions. Together, these types of prevention can **improve the health status of people at every stage of life** by working within and among all community sectors to make **healthy choices the easy choices where people live, learn, work, play, pray, and receive care.**

These “Healthy Communities” efforts are largely community-driven and coalition led, and operate around a five-phased process that involves the development of a community coalition (Phase I), performing a community health assessment (Phase II), prioritizing assessment results and engaging in action planning (Phase III), implementing a community action plan (Phase IV), and conducting routine evaluation and progress review (Phase V).<sup>6</sup>

**Figure 1: Five-Phased Healthy Communities Model<sup>6</sup>**



## **National Organizations**


There is growing evidence that suggests that national nonprofit organizations can make a significant contribution to the prevention and management of chronic diseases at the local community level.<sup>4</sup> **National public health partners with their memberships and associations have the reach, influence, access and capabilities for effective and targeted responses and interventions to combat the battle of chronic disease.**<sup>9</sup> This has been documented with the CDC's Healthy Communities Program, most notably with the Action Communities for Health, Innovation, an EnVironmental change (ACHIEVE) initiative. The ACHIEVE model capitalized on the experience and expertise of national organizations in strengthening community leadership, building capacity, and activating change among funded community partners.<sup>5, 6</sup>

National organizations like NACDD can better assist in the development of partnerships to pursue common goals; develop legislative analyses concerning local, state, and national chronic disease programs and issues;

advocate for proven planning and evidence-based community prevention interventions; and provide educational and training opportunities for its nationwide reach of state members and local affiliates.<sup>7, 8</sup> These types of collaborations have integrated public health practice by uniting local leaders and stakeholders to implement coalition-led Healthy Communities efforts within and across multiple community sectors.<sup>7</sup>

NACDD demonstrated the success of the ACHIEVE national-local partnership model by funding 48 communities in 31 states and one US territory to instill sustainable and successful outcomes, PSE changes, and CCL changes over a five-year project so that healthy choices could become the easy choices in all sectors of the community. Collectively and backed up with two-year post-project data, NACDD's communities accomplished **2,725 sustainable outcomes and community improvements that now positively impact the health of more than 6,500,000 people.**<sup>6</sup>

Perhaps the most impressive aspect of this partnership is illustrated through **NACDD's near 20:1 ROI and the estimated \$66,000,000 that communities leveraged to sustain and continue** their Healthy Community efforts.<sup>6</sup>



**"Working with NACDD on ACHIEVE has been the most rewarding partnership in my career, and has been the single most contributor to our local success."**

*(Rachael Banks, NACDD ACHIEVE funded community of Multnomah County, OR 2009)*

## Additional Benefits of Using National Organizations in Healthy Communities Efforts

National organizations can: 4, 5, and 10

- Bring together the **right people and resources** to facilitate change in communities nationwide;
- Establish infrastructure and a **wide range of existing partnerships** that can benefit local communities;
- Act as neutral conveners, trusted resources, strategic advisors, and collaborate with mutual responsibility;
- Translate and disseminate how local successes and lessons learned make an impact at a broader level, as well as in other regions and communities throughout the nation;
- Engage recognized experts from **diverse backgrounds and sectors**;
- Translate ideas into applicable, sustainable, and impactful strategies that can work in the local community setting;
- Establish **peer learning networks, community mentor models**, and other methods for sharing and mentoring within and among local communities;
- Assist with **influencing federal policy** that better enables local change efforts;
- Equip community leadership teams with tools, trainings, and opportunities for planning and implementing the community change process;
- Provide dedicated staff to support local communities and states;
- Provide expertise in facilitation, data collection, and partner engagement; and
- Assist local communities with **linking community based efforts and organizations with clinical providers to maximize prevention efforts** so people with chronic diseases can better manage their conditions.

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