

# Public Health is ROI

SAVE LIVES, SAVE MONEY



## OVERVIEW

NATIONAL PUBLIC HEALTH WEEK

April 1-7, 2013 :: [www.nphw.org](http://www.nphw.org)



American  
Public Health  
Association



# 1 :: Overview

Welcome from APHA Executive Director



Dear Colleagues:

January 2, 2013

Every April since 1995, communities nationwide have joined together to celebrate National Public Health Week. And while each NPHW has a different theme and is observed with different events, there are always two common threads: public health and prevention.

This year during NPHW 2013, we're zeroing in on those two common threads with a theme of "Public Health is ROI: Save Lives, Save Money." Much like the business world, ROI indicates the return on investments. Supporting evidence-based public health programs will result in healthier communities and reduced cost in treating diseases. We hope that this year as you plan local NPHW events — whether it's a community health fair, a panel discussion or a mayoral proclamation — you'll help raise awareness of the critical roles that public health and prevention play in keeping all communities healthy and safe.

Most importantly, help raise awareness of the value of strong public health systems to our health, our lives and our pocketbooks. Ask your audiences: What would our lives and communities look like without public health? It's a conversation that will most certainly engage, illuminate and educate.

Passing along just a few compelling statistics can go a long way in helping people recognize the value of investing in public health and prevention. It can also help broaden the notion of good health from something that happens in doctors' offices to something that happens in our communities. For example, does your community know that investing \$10 per person each year in community-based public health activities could save more than \$16 billion within five years? Are they familiar with the magnitude of just how many lives are saved thanks to vaccines? Do they know that investments in public health systems coincide with improvements in health, especially in children's health?

Public health has a role in all of our lives; similarly, we each have a role in bringing the lessons of public health and prevention to life. Even the smallest steps can make a big difference. We hope you'll join us in raising awareness of the value of public health and prevention in your community during NPHW 2013 (April 1–7) by observing this year's daily themes:

- **MONDAY: ENSURING A SAFE, HEALTHY HOME FOR YOUR FAMILY** — Promote the easy and sometimes life-saving steps people and families can take to build a healthy home, such as installing smoke alarms or creating a household emergency preparedness plan.
- **TUESDAY: PROVIDING A SAFE ENVIRONMENT FOR CHILDREN AT SCHOOL** — Raise awareness of the links between good health and academic achievement and how schools can play a big role in improving children's health.
- **WEDNESDAY: CREATING A HEALTHY WORKPLACE** — Teach communities how public health works for them, especially in preventing illness and injury on the job. Promote wellness in the workplace — it's good for employees, employers and the bottom line.
- **THURSDAY: PROTECTING YOU WHILE YOU'RE ON THE MOVE** — Good health isn't stationary; it follows us from place to place. Promote safe traveling practices and educate on the link between smart transportation planning and opportunities for safe, outdoor physical activity.
- **FRIDAY: EMPOWERING A HEALTHY COMMUNITY** — Public health's most important partners in achieving better health are the communities they serve. Engage and empower communities with the tools and resources to lead the movement for a healthier America.

We hope this toolkit will help you engage your communities not only in prevention, but also in a larger discussion about the unique role that public health systems play in our lives. After all, we are all living examples of the public health return on investment.

Thank you for joining APHA's mission to create a healthier America. Together, we can shape a healthier future for all.

Sincerely,

Georges Benjamin, MD, FACP, FNAPA, FACEP (E)  
Executive Director, American Public Health Association

## Talking Points

Since 1995, communities from coast to coast have observed National Public Health Week every April, celebrating the work of public health and coming together in support of better health for all. Each year, we select a different topic on which to focus our effort. This year's theme is "Public Health is ROI: Save Lives, Save Money."

This year as we invite our communities to join us in collaboration for National Public Health Week for free screenings and health fairs, as we raise awareness of prevention and early detection, and as we teach the public about the small, easy steps they can take to protect their health, let's also help them understand how public health makes it all possible. Whether it's through research, data collection, health education, policy change or direct services, public health lays the foundations and creates the conditions that put the healthy choice well within reach.

Every day, public health practitioners work to ensure everyone has the opportunity to lead a healthy life. They collect the data that show which communities are at highest risk and where resources are needed most; they convene diverse stakeholders and build the community capacity needed to tackle a problem and sustain efforts over the long term; and they empower communities with the tools, knowledge and resources to make a difference and take charge of their health. As the country's leading voice for prevention and health equity, public health practitioners work in every corner of our communities — the places where health happens and prevention comes to life.

The value of a strong public health system is quite literally all around us — it's in the air we breathe, the water we drink, the food we eat, and the places where we all live, learn, work and play. It's in the thousands of people whose lives are saved by seat belts, the young people who say 'No!' to tobacco and the children given a healthy start thanks to vaccines. It is no stretch to say that we are all living examples of the public health return on investment.

This NPHW, let's help our communities connect the dots between healthy people and communities and strong, well-funded public health systems. We need their support just as much as they need ours.

### **Quick Facts:** *The Value of Public Health To Our Lives and Pocketbooks*

- The U.S. spends far more on health care than any other country, with such costs rising ten-fold from 1980 to 2010 and expected to rise faster than national income during the foreseeable future. However, investing just \$10 per person each year in proven, community-based public health efforts could save the nation more than \$16 billion within five years. That's a \$5.60 return for every \$1 invested.<sup>1</sup>
- Routine childhood immunizations save \$9.9 million in direct health care costs, save 33,000 lives and prevent 14 million cases of disease.<sup>2</sup>
- A \$52 investment in a child safety seat prevents \$2,200 in medical costs, resulting in a return of \$42 for every \$1 invested.<sup>3</sup> Similarly, a \$12 investment in a child's bicycle helmet can prevent \$580 in medical costs, resulting in a return of \$48 for every \$1 invested.<sup>4</sup>
- The cost of providing dental care for children enrolled in Medicaid and living in communities without fluoridation is twice as high as for children who receive the oral health benefits of drinking water fluoridation.<sup>5</sup>

1 Levi, J. et al, Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities. Trust for America's Health. Feb. 2009.

2 Centers for Disease Control and Prevention. Fiscal Year 2011 President's Budget Congressional Justification.

3 Children's Safety Network and Pacific Institute for Research and Evaluation. Injury Prevention: What Works? A Summary of Cost-Outcome Analysis for Injury Prevention Programs (2010 Update). Nov. 15, 2010.

4 Ibid.

5 Centers for Disease Control and Prevention. Water Fluoridation and Costs of Medicaid Treatment for Dental Decay, Louisiana 1995-1996. MMWR September 1999. 48 (34); 753-757.

- Childhood health problems linked to preventable environmental exposures, such as lead poisoning, asthma complications and developmental disabilities, cost the U.S. \$76.6 billion in 2008. Such costs have increased from 2.8 percent of total health care costs in 1997 to 3.5 percent in 2008.<sup>6</sup>
- Every \$1 invested in the nation's poison center system saves \$13.39 in medical costs and lost productivity, saving a total of more than \$1.8 billion every year. Poison centers receive about 4 million calls every year, 2.4 million of which are about poison exposures.<sup>7</sup>
- Each 10 percent increase in local public health spending contributes to a 6.9 percent decrease in infant deaths, a 3.2 percent decrease in cardiovascular deaths, a 1.4 percent decrease in deaths due to diabetes, and a 1.1 percent decrease in cancer deaths.<sup>8</sup>
- Every year, newborn screening efforts test nearly every baby born in the U.S. for health conditions that — if detected early enough — can be treated in time to prevent developmental problems, disability and death. For example, testing the 4 million infants born every year for congenital hypothyroidism costs \$5 per newborn and prevents 160 cases of intellectual disability.<sup>9</sup>
- By 2020, the direct benefits of the federal Clean Air Act will have reached almost \$2 trillion, much more than the \$65 billion it will have cost to implement the law. About 85 percent of the \$2 trillion is attributable to decreases in premature death and illness related to air pollution.<sup>10</sup>
- Twenty-three to one: That's the rate of the return on investment in clean water technologies in the first half of the 20th century.<sup>11</sup>
- Widening access to care by investing in expanded Medicaid eligibility, which is encouraged and funded via the Patient Protection and Affordable Care Act, results in better health outcomes and reductions in mortality, especially among communities already struggling with health problems.<sup>12</sup>
- From 1991 to 2006, investments in HIV prevention averted more than 350,000 infections<sup>13</sup> and saved more than \$125 billion in medical costs.<sup>14</sup>
- In 2009, seat belts saved about 13,000 lives and could have saved thousands more if all drivers and passengers had buckled up.<sup>15</sup>
- Expanding the diagnosis and treatment of depression has an ROI of \$7 for every \$1 invested.<sup>16</sup> Also, substance abuse treatment has an ROI of \$4–\$7 for every \$1 invested.<sup>17</sup>
- Citing the protective health benefits of breastfeeding, research finds that a minimum of \$3.6 billion could be saved if more women began and continued to breastfeed their newborns through 6 months of age.<sup>18</sup>

6 Trasande, L., Liu, Y., Reducing the Staggering Costs of Environmental Disease in Children, Estimated at \$76.6 billion in 2008. *Health Affairs* 30, No. 5 (2011).

7 American Association of Poison Centers, Final Report on the Value of the Poison Center System, Sept. 26, 2012.

8 APHA Infographic available at: [action.apha.org/site/PageNavigator/Infographic\\_Page\\_2012\\_10\\_04\\_Round\\_2.html](http://action.apha.org/site/PageNavigator/Infographic_Page_2012_10_04_Round_2.html)

9 Centers for Disease Control and Prevention. CDC Grand Rounds: Newborn Screening and Improved Outcomes. *MMWR* June 1, 2012; 61(21):390-393.

10 U.S. Environmental Protection Agency. The Benefits and Costs of the Clean Air Act from 1990 to 2020. March 2011.

11 Cutler D, Miller G. The role of public health improvements in health advances: The 20th Century United States, 2004. National Bureau of Economic Research.

12 Sommers B, Baicker K, Epstein A. Mortality and Access to Care Among Adults After State Medicaid Expansions. *New England Journal of Medicine* 2012; 367 (11), 1025-1034.

13 Holtgrave DR. Written Testimony on HIV/AIDS Incidence and Prevention For Hearing to be held September 16, 2008. <http://oversight-archive.waxman.house.gov/documents/20080916115223.pdf>.

14 Farnham PG, Holtgrave DR, Sansom SL, et. al. Medical Costs Averted by HIV Prevention Efforts in the United States, 1991–2006. *JAIDS* 2010;54:565-67.

15 U.S. Department of Transportation, National Highway Traffic Safety Administration. Lives Saved in 2009 by Restraint Use and Minimum-Drinking-Age Laws. 2010.

16 National Alliance on Mental Illness Policy Research Institute. Website; [www.nami.org/Template.cfm?Section=Policymakers\\_Toolkit&Template=/ContentManagement/ContentDisplay.cfm&ContentID=19148](http://www.nami.org/Template.cfm?Section=Policymakers_Toolkit&Template=/ContentManagement/ContentDisplay.cfm&ContentID=19148)

17 Harwood H. An Inventory of Cost Offset Studies for State Substance Abuse Agencies. National Association of State Alcohol and Drug Abuse Directors; 2009.

18 Weimer J. The Economic Benefits of Breastfeeding: A Review and Analysis. U.S. Department of Agriculture, Food and Rural Economics Division, Economic Research Service. March 2001.

- Tobacco use is responsible for more than 400,000 U.S. deaths every year, and the cost of tobacco use in the U.S. tops \$298 billion. But research has found that the benefits of cessation programs nearly always outweigh the costs: From state to state, the ratio of benefits to cost ranges from 86 cents to more than \$2.50 for every \$1 invested.<sup>19</sup>

## **NPHW 2013:** *Why Is It Important?*

Good health doesn't happen by chance. Good health is shaped and nurtured — it's connected to the environments in which we live, work and play; it's tied to the resources available in our communities; and research shows that it's undoubtedly linked to a person's access to health care. These are the intersections where you find public health and prevention.

Yes, personal responsibility and better access to quality medical care are critical. But that's not enough to turn around health care spending, curb disease rates and continue to move toward a healthier future.

For example, while diabetes and obesity can be treated inside a doctor's office, the costly and preventable conditions won't be solved there. Tackling obesity and diabetes will take widening access to affordable healthy foods; putting opportunities for physical activity back into our communities through smarter transportation and land use planning; educating the public on the science of nutrition; working with industry, schools and employers on common solutions; and collecting the data to see what works. These are the roles of public health.

We also need public health to monitor West Nile virus cases and implement prevention strategies; make sure new moms have the resources and knowledge they need to have healthy babies; enforce food safety rules and investigate food-borne illness outbreaks; respond to and prepare communities for natural disasters and emergencies; provide access to vaccines; test our drinking water; ensure safe working and housing conditions; track chemical exposures for possible health risks; and so much more.

The irony is that the ROI of public health is so broad in terms of improving our quality of life that it's nearly impossible to comprehend its impact in its entirety. And yet, it's also often said that public health is invisible — that most people don't know what public health is or how it impacts their lives.

This NPHW, help us make public health visible and stand up for the value of public health and prevention in our lives. Help us spread the word that investing in public health is an investment in our nation's health and by extension, our future. During your NPHW events, talk to your communities about what public health does and collect the stories that illustrate the difference public health has made in people's lives. We need to protect the public health system — this vital piece of our everyday lives — and everyone has a role to play.

There are big health challenges ahead, but current budget cuts mean many public health agencies are struggling just to maintain the hard-fought gains we've made. These cuts compromise the public health system's capacity to protect community health and leave us all more vulnerable to preventable illness and injury as well as higher medical costs.

- In 2012, the ACA-authorized Prevention and Public Health Fund, the nation's first mandatory funding stream dedicated to disease prevention, was cut by 33 percent. More than one congressional attempt has been made to eliminate the fund entirely and advocates warn that it is still at risk.
- From July 2010 to June 2011, 55 percent of all local health departments reduced or cut at least one program, with programs for mothers and children among the worst hit. From January to June of 2011, local health departments lost a collective 5,400 jobs.<sup>20</sup>

<sup>19</sup> Rumberger J, Hollenbeak C, Kline D. Potential Costs and Benefits of Smoking Cessation: An Overview of the Approach to State Specific Analysis. Pennsylvania State University. April 30, 2010.

<sup>20</sup> National Association of County and City Health Officials. Local Health Department Job Losses and Program Cuts: Findings from the January 2012 Survey. May 2012.

- President Barack Obama's fiscal year 2013 budget proposal would reduce the budget at the Centers for Disease Control and Prevention (CDC) by \$664 million, which means the agency will have absorbed \$1.4 billion in cuts since fiscal year 2010.<sup>21</sup>
- Federal funds for state and local emergency preparedness have gone down more than 25 percent between fiscal years 2005 and 2011<sup>22</sup>; states have cut about \$314 million from state maternal and child health programs since 2007<sup>23</sup>; and as of 2011, state funding for tobacco prevention and cessation had been cut by more than \$260 million in the previous four years.
- Nearly 1 million Americans die every year from preventable diseases. Chronic, preventable illnesses, such as heart disease and diabetes, account for 75 percent of U.S. health care spending or \$1.5 trillion per year. Yet only 3 percent of our health care dollars go toward preventing disease.<sup>24</sup>

## What Is Our Priority?

This year, we're focusing on raising awareness about the role of public health and prevention in our lives, our health and our pocketbooks. Poor health comes at a big price — for us all. But research shows that investments in evidence-based public health and prevention can make a big difference. Connect with official NPHW social media and use your own social media accounts to help spread the word to your family, friends, neighbors, co-workers, local leaders, and state and congressional representatives: Public Health is ROI: Save Lives, Save Money.

## How Can Investing In Public Health and Prevention Create A Healthier America?

In the business world, a return on investment, or ROI, refers to the amount of profit made in relation to the capital invested. In the world of public health, however, ROI is much different. Oftentimes, public health ROI refers to avoided medical spending due to investments in prevention and early disease detection. However, public health ROI should also be measured in the number of diseases and injuries prevented, the number of lives saved and the amount of productivity gained due to investing in public health and prevention.

By adequately supporting public health and prevention, we can transform a health system that's now focused on treating illness to one focused on preventing disease and promoting wellness. And we all have a role to play. By taking small actions, we can help our communities, friends and families see the much larger benefits of prevention.

- Make just one positive change a day to improve your health. Small things such as eating healthy foods, engaging in regular physical activity, avoiding tobacco and staying up to date on recommended vaccines can make a big difference in helping you live a longer, healthier life.
- You have the power to make positive preventive changes in your community. Think about what your community needs most — more bike lanes, increased access to healthy foods, safer places to play outside — and brainstorm solutions. Tell others about your ideas and take action. Let your local leaders know why prevention is important and how strong public health systems make prevention possible. Make your voice heard!

21 CDC Coalition. Fiscal Year 2013 Budget Request. Available at: [www.cdccoalition.org/pg\\_budget.htm](http://www.cdccoalition.org/pg_budget.htm)

22 Trust for America's Health. Ready or Not? Protecting the Public from Diseases, Disasters and Bioterrorism. December 2011.

23 Association of Maternal and Child Health Programs. Available at: [www.amchp.org/Policy-Advocacy/Pages/default.aspx](http://www.amchp.org/Policy-Advocacy/Pages/default.aspx)

24 APHA. The Prevention and Public Health Fund: A critical investment in our nation's physical and fiscal health. June 2012. Available at: [www.apha.org/advocacy/reports/reports](http://www.apha.org/advocacy/reports/reports)

## Ensuring a Safe, Healthy Home for Your Family

Public health is in every corner of our homes. It's in the safe food in the fridge, the carbon monoxide and smoke detectors affixed to the ceiling, and the child-proof latches that keep dangerous chemicals out of little hands. Home is also where we learn healthy behaviors, such as eating right and exercising. Good prevention starts at home.

### Did You Know?

- The majority of fire-related deaths happen at home. In 2010 in the United States, someone died in a fire every 169 minutes and someone was injured every 30 minutes.<sup>25</sup> About two-thirds of home fire deaths happened in homes without working smoke alarms.<sup>26</sup>
- Falls are the leading cause of injury-related deaths among people ages 65 and older. Each year, one out of every three adults ages 65 and older experiences a fall. In 2010, falls resulted in \$30 billion in direct medical costs.<sup>27</sup>
- Nine out of every 10 childhood poison exposures happens at home, with medications being among the top culprits.<sup>28</sup>
- More than half of all swimming pool drownings among children could have been prevented with appropriate fencing that completely separates the pool from the house and yard.<sup>29</sup>
- Many more efforts are needed to help all families and households adequately prepare for natural disasters and other emergencies, such as having a three-day supply of water and a written evacuation plan.<sup>30</sup>
- Fewer than 15 percent of adults and 10 percent of adolescents eat the recommended amounts of fruits and vegetables each day.<sup>31</sup>

### What Public Health Teaches Us

#### *Start small...*

- Smoke alarms can double your chance of surviving a fire, so install alarms on every floor of your home and test that they're working monthly. While you're at it, install a carbon monoxide alarm on every floor of your home as well.
- Help prevent fires — as well as serious health problems and chronic diseases — by making your home tobacco- and smoke-free.
- Keep potentially dangerous household products, such as cleaning products, cosmetics and prescription medications, locked up and out of children's reach. Also, never store household chemicals in old food containers or in the same place you keep food items. Learn more at [www.upandaway.org](http://www.upandaway.org).

<sup>25</sup> Centers for Disease Control and Prevention Injury Center. Available at: [www.cdc.gov/homeandrecreationalafety/fire-prevention/fires-factsheet.html](http://www.cdc.gov/homeandrecreationalafety/fire-prevention/fires-factsheet.html)

<sup>26</sup> National Fire Protection Association. Available at: [www.nfpa.org/itemDetail.asp?categoryID=953&itemID=23071&URL=Research/Fire%20statistics/The%20U.S.%20fire%20problem&cookie\\_test=1](http://www.nfpa.org/itemDetail.asp?categoryID=953&itemID=23071&URL=Research/Fire%20statistics/The%20U.S.%20fire%20problem&cookie_test=1)

<sup>27</sup> Centers for Disease Control and Prevention. Home and Recreational Safety. Available at: [www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html](http://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html)

<sup>28</sup> Safe Kids USA. Available at: <http://www.safekids.org/our-work/research/fact-sheets/poison-prevention-fact-sheet.html>

<sup>29</sup> Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/Features/dsSafeSwimmingPool/>

<sup>30</sup> Centers for Disease Control and Prevention. Household Preparedness for Public Health Emergencies — 14 States, 2006–2010. *MMWR* Sept. 14, 2012. **61(36);713-719.**

<sup>31</sup> Kimmons J, Gillespie C, Seymour J, Serdula M, Blanck HM. Fruit and vegetable intake among adolescents and adults in the United States: Percentage meeting individualized recommendations. *Medscape J Med.* 2009; 11(1):26.

- Gather your household for a night of emergency preparedness: Make plans for putting together an emergency stockpile kit, create a crisis communication plan, designate an emergency meeting place and hold household emergency drills.
- Put this number on your fridge and in your cell phone: 1-800-222-1222. It will automatically connect you to your regional poison control center and often life-saving information.
- Put up four-sided fencing that's at least five feet high with self-latching gates around swimming pools to protect children from injury.
- Assess your home, or the home of a loved one, for factors that could contribute to a fall, such as poor lighting, uneven flooring and clutter.
- Stock your kitchen with plenty of fresh fruits and vegetables and cut down on high-sugar and high-fat items.
- Learn about proper food handling and cooking techniques to avoid food-borne illness.
- Learn how to properly dispose of unused medications.
- Tell your friends and online followers how you and your household are celebrating National Public Health Week. Keep a journal of the changes you've made on your blog or other social media accounts or send a letter to the editor to your local newspaper. Let others know how easy — and fun — it can be to make public health and prevention a part of our lives.

### *Think big...*

- Help organize a yoga or Tai Chi class for older adults to help improve balance and prevent falls.
- Organize a community fire safety event with the local fire department.
- Get involved in community efforts addressing the growing epidemic of prescription drug abuse, such as promoting drug take-back events.
- Spread the word about emergency preparedness at your children's school, your parents' retirement community and the other places you spend time. Volunteer to help these places assess their readiness and start planning.
- Promote awareness of how local public health systems keep communities healthy at home, such as keeping our food and water safe. Encourage residents and leaders to take a moment to imagine how dramatically our lives would change if that system disappeared. Let your key decision-makers know that you support public health and prevention.

There is much more you can do to ensure a safe and healthy home for you and your family. To learn more about putting prevention to work at home, visit [www.cdc.gov/homeandrecreationalsafety](http://www.cdc.gov/homeandrecreationalsafety).

## Providing a Safe Environment for Children at School

Healthy children learn better — that's a fact. Research has found that students' health affects their grades, attendance, behavior and whether they graduate. And we also know that education is one of the many social determinants that influence a person's health throughout the life span. Fortunately, public health and education systems have a long and fruitful history of working together to keep students safe and teach them healthy habits. Still, there's much more to do to make sure our schools are healthy and supportive environments — and you can help.

### Did You Know?

- Obesity prevalence among children and teens has nearly tripled since 1980. Today, about 17 percent, or 12.5 million, of children and teens ages 2 to 19 are obese.<sup>32</sup>
- In 2011, only 29 percent of high school students surveyed nationwide took part in the recommended 60 minutes per day of physical activity and only 31 percent attended a daily PE class.<sup>33</sup>
- In 2009, about one in 10 children had asthma. Overall, health care costs associated with asthma among adults and children topped \$50 billion in 2007.<sup>34</sup>
- During the 2006–2007 school year, more than 31 percent of students ages 12 through 18 said they were bullied at school.<sup>35</sup> Sixty-two percent of school employees surveyed in 2010 said they witnessed bullying two or more times in the last month.<sup>36</sup>
- Every day, nearly 4,000 young people try their first cigarette and about 1,000 will become daily smokers.<sup>37</sup>
- In 2011, 16.7 million children lived in food-insecure households, meaning they didn't have enough nutritious food to lead a healthy life.<sup>38</sup>

### What Public Health Teaches Us

#### *Start small...*

- Advocate for smoke- and tobacco-free policies at schools as well as on college campuses.
- Learn about a school's asthma policies: Does the school keep asthma action plans on file? Are students allowed to carry inhalers? Does the school nurse know which students have asthma? Support policies that reduce asthma risks, such as prohibiting school bus idling and using non-toxic cleaning supplies.

32 Centers for Disease Control and Prevention. Available at: [www.cdc.gov/obesity/data/childhood.html](http://www.cdc.gov/obesity/data/childhood.html)

33 Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance—United States, 2011. *MMWR* 2012;61(SS-4).

34 Centers for Disease Control and Prevention. Vital Signs: Asthma in the U.S. Available at: [www.cdc.gov/VitalSigns/Asthma/index.html](http://www.cdc.gov/VitalSigns/Asthma/index.html)

35 U.S. Department of Education. Student Reports of Bullying and Cyber-Bullying: Results from the 2007 School Crime Supplement to the National Crime Victimization Survey. May 2011.

36 National Education Association. NEA Bullying Survey. March 2011.

37 Gilman SE, Rende R, Boergers J, et al. Parental Smoking and Adolescent Smoking Initiation: An Intergenerational Perspective on Tobacco Control, *Pediatrics* 2009 Feb;123(2):e274-e281.

38 Coleman-Jensen, A., Nord, M., Andrews, M., & Carlson, S. (2012). Household Food Security in the United States in 2011. USDA ERS.

- Organize for school-wide policies and action against bullying and create a safe space for kids experiencing bullying to get help.
- Voice your support for new national school meal standards that, among other measures, ensure students have daily access to fruits and veggies and limit the amount of saturated fat, trans fat and sodium.
- Encourage your child's school to stop stocking soda and junk food in school vending machines and to put restrictions on the types of foods sold in schools that are outside official school meal programs.
- Speak up about the importance of physical education in school.
- Volunteer for school health education efforts that teach kids to say no to tobacco, drugs and alcohol.
- Support evidence-based sexual health education that's aimed at preventing disease and unplanned pregnancy and is inclusive of gay, lesbian, bisexual and transgender students.

### *Think big...*

- Encourage schools to get involved in the national HealthierUS School Challenge, a voluntary certification initiative that recognizes schools that have created healthier environments by promoting nutrition and physical activity.
- Learn more about First Lady Michelle Obama's Let's Move! campaign and how it can promote more physical activity in schools.
- Encourage local leaders to support transportation planning decisions that incorporate safe routes to walk and bike to school. Get involved in your local Safe Routes to School Program or organize an event during International Walk to School Day.
- Let your national leaders know that you support the National School Lunch and School Breakfast Programs, which provide all children with access to nutritious meals, regardless of their family's income.
- Involve the larger community in recognizing bullying and developing community-wide responses to bullying.
- Write a letter to the editor or to decision-makers in support of local, state and federal investments in school-based health centers. These centers provide a range of health services, from chronic disease management to mental health counseling, and often serve as critical safety nets for vulnerable children and adolescents.

There is much more you can do to support safe environments and adequate for children at school. To learn more, visit [www.schoolbasedhealthcare.org](http://www.schoolbasedhealthcare.org).

## Creating a Healthy Workplace

Thanks to workers' rights and public health movements, workplaces have become dramatically safer places during the last century: According to the National Safety Council, deaths from unintentional work injuries declined 90 percent from 1933 to 1997. However, workers still get hurt and injured on the job and oftentimes such injuries — and deaths — are completely preventable. No one should have to unnecessarily risk his or her life or health to make a living.

Additionally, more and more research is showing that investing in workplace wellness programs do reap positive impacts on workers' health and pocketbooks. Such wellness efforts also help employers contain health care costs. It's as simple as this: Prevention makes good business sense.

### Did You Know?

- In 2011, more than 4,600 workers died in the United States due to an injury on the job.<sup>39</sup>
- While fatal work injuries declined for white workers in 2011, such injuries rose among Hispanic workers by 3 percent. Fatal work injuries also rose among workers ages 20 to 24 by 18 percent.<sup>40</sup>
- In 2009, about 572,000 violent crimes, such as rape, robbery and assault, happened against people ages 16 and older while they were at work. Also in 2009, more than 500 people were victims of homicide while at work.<sup>41</sup>
- In 2011, musculoskeletal disorders made up 33 percent of all work-related injury and illness cases.<sup>42</sup>
- The cost of obesity among full-time employees tops \$73 billion, which includes the total value of lost productivity and medical costs.<sup>43</sup>
- Research finds that medical costs fall by about \$3.27 for every dollar invested in workplace wellness programs.<sup>44</sup>

### What Public Health Teaches Us

#### *Employers start small...*

- Understand and follow all workplace safety regulations and best practices. Don't stop at doing the minimum — go beyond Occupational Safety and Health Administration standards.
- Educate employees about workplace safety regulations and train employees to recognize unsafe or unhealthy settings. Depending on your workforce, make sure safety training is available in multiple languages.
- Create a work environment in which workers feel comfortable reporting unsafe work conditions or workplace abuse.
- Provide the required equipment to keep workers safe, such as respiratory gear and hard hats.

39 U.S. Department of Labor, Bureau of Labor Statistics. Census of Fatal Occupational Injuries Summary, 2011. September 2012.

40 Ibid.

41 U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Workplace Violence, 1993-2009, National Crime Victimization Survey and the Census of Fatal Occupational Injuries. March 2011.

42 U.S. Department of Labor, Bureau of Labor Statistics. Nonfatal Occupational Injuries and Illnesses Requiring Days Away From Work, 2011. November 2012.

43 Finkelstein E, daCosta DiBonaventura M, Burgess S, Hale B. The Costs of Obesity in the Workplace. *Journal of Occupational and Environmental Medicine*, October 2010; 52(10):971-976.

44 Baicker, K, Cutler D, Song Z. Workplace wellness programs can generate savings. *Health Affairs*, 2010; 29(2): 304-311.

- Hold your subcontractors accountable for implementing safety standards and trainings.
- Put in place mechanisms for recognizing and addressing the potential for workplace violence.
- Even our homes can be workplaces. If you employ domestic workers, such as health care aides, nannies or house cleaners, learn what it means to be a responsible employer.
- Practice fire safety drills and prepare your workplace for an unexpected emergency or disaster.
- Take simple steps to create workplace wellness, such as posting hand-washing reminders, catering meetings with healthy foods or organizing workplace walking groups. Reach out to your local public health department — they can help. Also, if you provide employer-based health insurance, consider certain financial incentives that can improve health, such as incentivizing employees to quit using tobacco.

### *Employees start small...*

- Wear all personal protective equipment required or recommended for your job.
- Participate in workplace safety trainings and take advantage of workplace wellness efforts, such as flu shot clinics or exercise programs.
- Volunteer! Serve as a workplace fire drill captain, organize a lunchtime walking group or give out hand-washing information during flu season.
- Use your rights to advocate for safe and healthy workplaces — your voice can make all the difference for the workers that come after you.

### *Think big...*

- Make your support for investments in workplace health and safety known and cite the dramatic progress that equitable public health policies have brought to all workplaces. Write a letter to the editor to your local newspaper or write to your policymakers.
- Voice your support for legislation that sets a national standard for paid sick leave. Today, about four in 10 private-sector workers and 81 percent of the lowest-wage workers don't get paid sick days, forcing many to choose between caring for their health or a loved one's health and keeping their jobs. Paid sick leave not only improves worker security, it helps reduce the spread of diseases in the workplace.
- Invite local policymakers and others to a community roundtable to discuss injury prevention and wellness in the workplace and follow up with specific actions.
- Show support for businesses that ban indoor smoking and protect their employees from the dangers of secondhand smoke.
- Assist local businesses in preparing for the changes coming via the Patient Protection and Affordable Care Act. The health reform law contains many new changes and opportunities for both employee and employer.

There is much more you can do to help create healthy workplaces. To learn more, visit [www.cdc.gov/workplacehealthpromotion](http://www.cdc.gov/workplacehealthpromotion) or [www.osha.gov/SLTC](http://www.osha.gov/SLTC).

## Protecting You While You're on the Move

Public health never stays in just one place. It stays with you while you're on the move, keeping you safe no matter your mode of transportation. Public health — one could say — is the perfect traveling companion.

In fact, the simple act of using a seat belt may be one of the most recognizable public health victories: From 1981 to 2010, seat belt use rose from 11 percent to about 85 percent, saving hundreds of thousands of lives. Nowadays, it just seems strange to see someone not buckle up. But the job's not done. Drivers, passengers, pedestrians and bicyclists still face preventable dangers on the road. Plus, a new national movement is quickly gaining momentum to design our communities with safe walking, biking and physical activity opportunities in mind. Let's move forward together.

### Did You Know?

- More than half of drivers and passengers killed in car crashes in 2009 were not wearing restraints.<sup>45</sup> In just one year, traffic-related deaths and injuries to drivers and passengers cost \$70 billion in medical costs and lost productivity.<sup>46</sup>
- In 2010, more than 4,200 pedestrians died in traffic crashes — a 4 percent increase from 2009. That same year about 70,000 pedestrians were injured in traffic crashes.<sup>47</sup>
- More than 600 bicyclists died in motor vehicle crashes in 2010 and 52,000 were injured.<sup>48</sup>
- More than 15 people are killed every day in the U.S. and more than 1,200 are injured in crashes involving a distracted driver.<sup>49</sup>
- Motor vehicle-related injuries are the leading cause of death among U.S. children.<sup>50</sup> However, child safety seats reduce the risk of death by 71 percent for infants and by 54 percent for children ages 1 to 4 years old.<sup>51</sup>
- Up to \$11.80 in benefits can be gained for every \$1 invested in bicycling and walking opportunities. States with the highest levels of biking and walking also have the lowest levels of costly chronic disease, such as high blood pressure, obesity and diabetes.<sup>52</sup>

45 U.S. Department of Transportation, National Highway Traffic Safety Administration. Traffic Safety Facts: Highlights of 2009 Motor Vehicle Crashes. 2010.

46 Naumann RB, Dellinger AM, Zaloshnja E, Lawrence BA, Miller TR. Incidence and total lifetime costs of motor vehicle-related fatal and nonfatal injury by road user type, United States, 2005. *Traffic Injury Prev* 2010;11:353–360.

47 U.S. Department of Transportation, National Highway Traffic Safety Administration. Traffic Safety Facts 2010 Data. August 2012.

48 Pedestrian and Bicycle Information Center. Bicycle Crash Facts. Available at: [www.bicyclinginfo.org/facts/crash-facts.cfm](http://www.bicyclinginfo.org/facts/crash-facts.cfm)

49 U.S. Department of Transportation, National Highway Traffic Safety Administration. Traffic Safety Facts: Distracted Driving 2009. September 2010.

50 Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System. Aug. 2, 2010.

51 U.S. Department of Transportation, National Highway Traffic Safety Administration. Traffic Safety Facts 2008: Children. 2009.

52 Alliance for Biking and Walking. Bicycling and Walking in the United States: 2012 Benchmarking Report. January 2012.

## What Public Health Teaches Us

### *Start small...*

- Always buckle your seat belt no matter how short the trip and don't be shy about reminding others to do the same.
- That text message can wait! Don't text while driving. Learn more at [www.distraction.gov](http://www.distraction.gov).
- Never drive impaired or let friends or family drive impaired. If you know you'll be drinking alcohol, make plans in advance that don't require you to drive, such as having a designated driver.
- Be an alert pedestrian — always be mindful when using intersections.
- Always wear a helmet when on a motorcycle or bicycle. If you're a driver, be mindful that you're sharing the road with more vulnerable travelers.
- Become familiar with the proper vehicle restraint systems for your child depending on his or her weight, height and age. For example, infants and toddlers through age 2 should be placed in rear-facing child safety seats, while children ages 2 to 4 should be placed in forward-facing child safety seats.
- Get involved with efforts to promote safe biking and walking to school, such as your local Safe Routes to School Program.
- If possible, choose to walk or bike to daily destinations, such as to work or school. Choosing biking or walking over driving is an easy way to integrate routine physical activity into your life.

### *Think big...*

- Write a letter to the editor to your newspaper or to decision-makers in support of transportation funding decisions that support and encourage all modes of travel, including biking, walking and public transit. Right now, less than 2 percent of federal transportation funds go toward biking and walking.
- Support alcohol screening and brief intervention programs in your community as well as graduated driver's license laws for new drivers.
- Get involved in local chapters of biking and walking advocacy groups, such as the League of American Bicyclists. Plan events to coincide with national observances, such as National Child Passenger Safety Week in September.
- Organize a community biking or walking group. Consider planning events that connect with other healthy opportunities, such as biking to a local farmers market or holding a community walking audit.
- Educate yourself on how local transportation, infrastructure and land use decisions affect your community's ability to safely choose walking, biking or public transit over driving. Voice your support for decisions that accommodate all modes of travel. Biking and walking make our communities exercise-friendly, improve community cohesion, make our neighborhoods safer and reduce harmful motor vehicle pollution. Inclusive transportation planning is good for public health.
- Support complete streets policies, which ensure that transportation planners design communities with all users — of all ages and abilities — in mind.
- When contacting policymakers, make sure to cite the return on investment of simple preventive measures, such as child safety seats and children's bicycle helmets (see Quick Facts at the beginning of this section).

There is much more you can do to help protect your community while it's on the move. To learn more, visit [www.saferoutesinfo.org](http://www.saferoutesinfo.org) or [www.nhtsa.gov](http://www.nhtsa.gov).

## Empowering a Healthy Community

It's impossible to disconnect our individual health from our community's health. When it comes to good health, a rising tide lifts all boats. And public health systems work to carefully monitor that tide, pinpointing choppy waters and struggling vessels and taking action to ensure that all boats have an opportunity to sail smoothly to healthier destinations.

Resilient, well-supported public health systems are critical to our nation's health and future. They maintain the health victories we've accomplished so far, such as dramatic reductions in tobacco use, and are essential to confronting today's big problems, such as rising chronic disease rates. We also need public health to monitor and protect us from emerging health threats, keep vaccine-preventable diseases at bay, provide life-saving services for vulnerable populations and so much more.

Just as important, we need public health's unique ability to rally communities around the many social determinants that shape people's health. The future of health is empowering communities with the tools, knowledge, resources and opportunities to make lasting change.

### Did You Know?

- More than 80 million U.S. residents do not have access to fluoridated water, which reduces tooth decay by 25 percent. Every dollar spent on fluoridation saves more than \$40 in dental care.<sup>53</sup>
- Despite high immunization rates in the U.S., about 42,000 adults and 300 children die every year from vaccine-preventable disease.<sup>54</sup> Every dollar spent on childhood immunizations alone saves \$18.40.<sup>55</sup>
- If 10 percent of adults began regularly walking, \$5.6 billion in heart disease costs could be averted. Also, a sustained 10 percent weight loss could reduce an overweight person's lifetime medical costs by up to \$5,300 by lowering the costs linked to hypertension, diabetes, heart disease, stroke and high cholesterol.<sup>56</sup>
- More and more research finds that community health workers can help reduce health care costs. For example, in Baltimore, community health workers helped residents with diabetes better self-manage their health, resulting in a 27 percent decrease in Medicaid costs.<sup>57</sup>
- If every state without a comprehensive smoke-free policy adopted one, they could reduce smoking-related deaths by 624,000. They would also save more than \$316 million in lung cancer treatment and more than \$875 million in heart attack and stroke treatment over five years.<sup>58</sup>

53 National Prevention, Health Promotion and Public Health Council. Available at: <http://www.healthcare.gov/prevention/nphpphc/strategy/preventive-services.pdf>.

54 Healthy People 2020. Available at: [www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=23#star](http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=23#star)

55 Trust for America's Health, Every Child by Two. Closing the Vaccination Gap: A Shot in the Arm for Childhood Immunization Programs. August 2004. Available at: [www.ecbt.org/media/pdf/TFAH\\_ImmunizationRpt.pdf](http://www.ecbt.org/media/pdf/TFAH_ImmunizationRpt.pdf).

56 Centers for Disease Control and Prevention. Preventing Chronic Diseases: Investing Wisely in Health. Available at: [www.cdc.gov/nccdphp/publications/factsheets/prevention/pdf/obesity.pdf](http://www.cdc.gov/nccdphp/publications/factsheets/prevention/pdf/obesity.pdf)

57 National Conference of State Legislatures. Community Health Workers: Expanding the Scope of the Health Care Delivery System. April 2008. Available at: [www.ncsl.org/print/health/chwbrief.pdf](http://www.ncsl.org/print/health/chwbrief.pdf)

58 American Cancer Society Cancer Action Network. Saving Lives, Saving Money: A state-by-state report on the health and economic impact of comprehensive smoke-free laws. 2011. Available at: [www.acscan.org/pdf/tobacco/reports/acscan-smoke-free-laws-report.pdf](http://www.acscan.org/pdf/tobacco/reports/acscan-smoke-free-laws-report.pdf)

## What Public Health Teaches Us

### *Start small...*

- Stay up to date on recommended vaccinations for yourself and your loved ones.
- Look up the national Physical Activity Guidelines for Americans to see how much physical activity you should get on a daily basis and encourage family and friends to do the same. Visit [www.health.gov/paguidelines](http://www.health.gov/paguidelines) to learn more.
- Support local farmers markets and other access points to fresh fruits and vegetables. It's not only good for your health; it's good for the local economy too.
- Join your Neighborhood Watch program.
- Inquire about volunteer opportunities at community health centers.
- Take part in national health observances, such as National HIV Testing Day, National Youth Violence Prevention Week and National Minority Health Month.
- Submit a letter to the editor to your local newspaper about the importance of National Public Health Week.

### *Think big...*

- Encourage local restaurants to provide nutrition information on their menus.
- Voice your support for smoke-free policies.
- Partner with local parks and recreational facilities to increase access to safe places to be outside and physically active.
- Work with local authorities to initiate violence intervention and prevention efforts.
- Reach out to clinical partners and engage them in community health and prevention efforts.
- Volunteer to speak about the importance of public health and prevention at local schools, houses of worship, workplaces and community organizations.
- Write a letter to the editor or to your policymakers in support of community health efforts, especially efforts connected to the landmark Prevention and Public Health Fund, the nation's first mandatory funding stream dedicated to preventing disease.
- Create a local health movement! Start a healthy food co-op, organize a canning circle, gather a walking group or form a club dedicated to volunteering.

There is much more you can do to help empower a healthy community. To learn more, visit [www.nphw.org](http://www.nphw.org).