



WHAT WORKS

Obesity Prevention and Control

Evidence-Based Interventions for Your Community



In the United States, more than one-third of adults and nearly 17 percent of children were obese in 2009–2010. Being obese increases the risk of developing chronic health problems like heart disease, stroke, diabetes, and certain cancers.

This brochure is designed to help public health program planners, community advocates, educators, and policymakers find proven intervention strategies—including programs, services, and policies—to reverse the U.S. obesity epidemic. It can help decision makers in both public and private sectors make choices about what intervention strategies are best for their communities. This brochure summarizes information in The Guide to Community Preventive Services (The Community Guide), an essential resource for people who want to know what works in public health.

Use the information in this brochure to help select intervention strategies you can adapt for your community to:

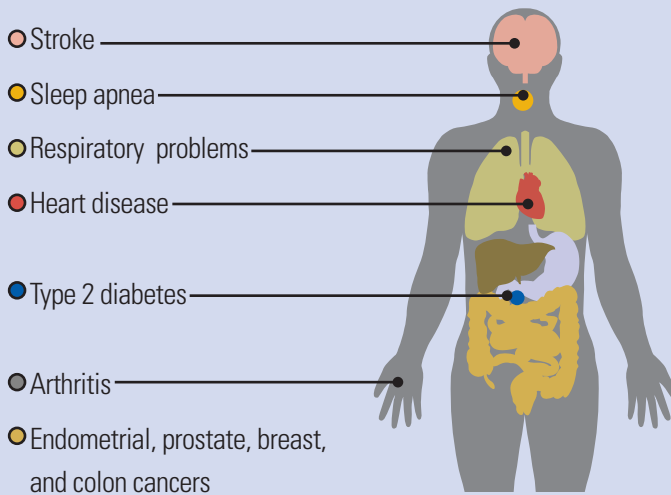
- Decrease the amount of time people spend in front of a computer or television screen.
- Use electronic or mobile technology to support coaching or counseling for weight loss or maintenance.
- Develop worksite programs for weight loss.

The Community Guide provides evidence-based findings and recommendations from the Community Preventive Services Task Force (Task Force) about community preventive services, programs, and policies to improve health. Learn more about The Community Guide and what works to prevent and control obesity by visiting www.thecommunityguide.org/obesity.

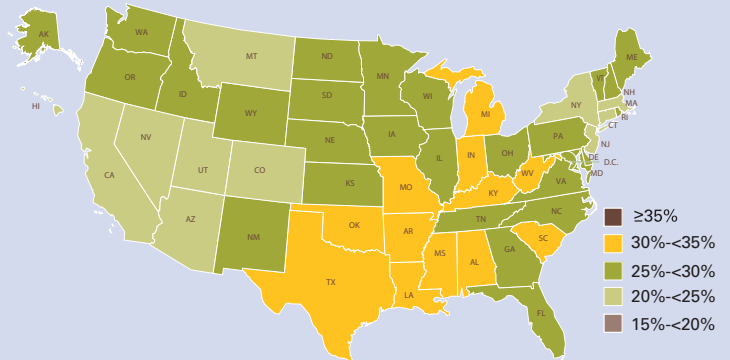
THE PUBLIC HEALTH CHALLENGE

Obesity is common, serious, and costly

- About **36%** of adults and **17%** of children and adolescents are obese.¹
- Obesity has **increased** across all income and education levels.³
- Obesity affects all race/ethnicity groups, with higher rates among **African-American and Hispanic** children and adults.^{4,5}
- **1 in 7** low-income preschoolers is obese, with higher rates among American Indians/Alaska Natives and Hispanics.⁶
- Obesity **increases** the risk of health conditions such as:²



Prevalence of Self-Reported Obesity Among U.S. Adults



Source: Behavioral Risk Factor Surveillance System (BRFSS), 2011

- In 2000, no U.S. state had an adult obesity rate of 30% or more; in 2011, **12 states** did.⁷
- Approximately **300,000 deaths** each year are attributed to obesity.⁸
- In 2008, medical costs associated with obesity were estimated at **\$147 billion**.⁹

For more information on obesity in the United States, including state-by-state data, see www.cdc.gov/obesity/data.

EVALUATING THE EVIDENCE

- The Task Force findings and recommendations for intervention strategies that prevent or control obesity are based on systematic reviews of the available evidence.
- The systematic reviews look at the results of research and evaluation studies published in peer-reviewed journals and other sources.
- Each systematic review looks at each intervention strategy's effectiveness and how it works in different populations and settings. If found effective, cost and return on investment are also reviewed when available.
- For each intervention strategy, a summary of the systematic review, evidence gaps, and journal publications can be found on the Obesity Prevention and Control section of the website at www.thecommunityguide.org/obesity.

▶ Community Preventive Services Task Force

The Guide to Community Preventive Services (The Community Guide) is an essential resource for people who want to know what works in public health. It provides evidence-based findings and recommendations about public health interventions and policies to improve health and promote safety. The Community Preventive Services Task Force (Task Force)—an independent, nonfederal, unpaid panel of public health and prevention experts—bases its findings and recommendations on systematic reviews of the scientific literature. With oversight from the Task Force, scientists and subject matter experts from the Centers for Disease Control and Prevention conduct these reviews in collaboration with a wide range of government, academic, policy, and practice-based partners.

More information about how the Task Force conducts its reviews is available at www.thecommunityguide.org/about/methods.html.


SUMMARIZING THE FINDINGS ON OBESITY

All Task Force findings and recommendations on preventing and controlling obesity are available online at www.thecommunityguide.org/obesity. Some of the Task Force recommendations related to obesity are below.

- ✓ **Interventions to reduce screen time.** Spending less time watching TV, video, or DVDs, playing video or computer games, and surfing the Internet can help people lose weight. Behavioral interventions—classes aimed at improving knowledge, attitudes, or skills—can reduce screen time by more than 36 minutes a day and result in modest weight loss among children and adolescents. These classes may include skills building, goal setting, and reinforcement techniques; encourage family support; or encourage “turnoff challenges” to get participants to avoid watching TV for a certain number of days.
- ✓ **Technology-supported coaching or counseling interventions.** Using technology in coaching or counseling interventions can help people to eat less, lose weight, and maintain the weight loss for 12 to 18 months. Technology-supported components include computer-based interfaces (such as computer kiosks, software programs, email, or the Internet), video conferencing, personal digital assistants, pagers, pedometers that “sync” with computers, and computerized telephone system interventions.
- ✓ **Interventions in specific settings.** Worksite nutrition and physical activity programs can help employees lose weight by improving their dietary and physical activity habits. These programs can include one or more approaches to support behavior changes, ranging from informational and educational (such as lectures or written materials) to behavioral and social (such as skills building and developing support systems), as well as to policy and environmental strategies (such as improving access to healthy foods on-site and offering more opportunities for physical activity). In randomized controlled trials, employees participating in worksite programs lost an average of 2.8 pounds. Cost-effectiveness ranged from \$1.44 to \$4.16 per pound of body weight lost.

PUTTING THE TASK FORCE FINDINGS TO WORK

As a public health decision maker, practitioner, community leader, or someone who can influence the health of your community, you can use The Community Guide to create a blueprint for success.

- ✓ Identify your community's needs. Review the intervention strategies recommended by the Task Force and determine which ones best match your needs. Adopt, adapt, or develop evidence-based programs, services, and policies that support individual weight loss efforts and create environments to help maintain a healthy weight.
- ✓ See how other communities have applied the Task Force recommendations and other intervention strategies for preventing and controlling obesity at www.thecommunityguide.org/CG-in-Action/index.html. Get ideas from their *Community Guide in Action* stories.
- ✓ Use tools and resources from **CDC's state and community programs** at www.cdc.gov/obesity/stateprograms/fundedstates.html to implement an effective local obesity prevention and control program.
- ✓ Explore Cancer Control P.L.A.N.E.T.'s **Research-tested Intervention Programs (RTIPs)**, community-based and clinical programs that have been evaluated, found to be effective, and published in a peer-reviewed journal. Look for the National Cancer Institute's Cancer Control P.L.A.N.E.T. icon  on The Community Guide website or visit rtips.cancer.gov/rtips to read about real-world programs that might be adaptable to your needs. You can learn more about RTIPs at www.thecommunityguide.org/cancer/screening/client-oriented/rtips.html.
- ✓ Consult **Partnership for Prevention's worksite health resources** at www.prevent.org/Topics/Worksite-Health.aspx to find evidence-based practices for promoting health in the workplace.

FOR MORE INFORMATION

The Community Guide: Obesity Prevention and Control

www.thecommunityguide.org/obesity

Division of Nutrition, Physical Activity, and Obesity, CDC

www.cdc.gov/nccdphp/dnpao

CDC's Vital Signs: Obesity Rises Among Adults

www.cdc.gov/vitalsigns/AdultObesity

CDC Prevention Research Center: Center for Training and Research Translation, University of North Carolina at Chapel Hill

www.center-trt.org

Let's Move! White House Task Force on Childhood Obesity

www.letsmove.gov

Healthy People 2020 Interventions and Resources on Physical Activity

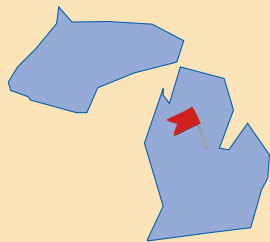
www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=33



THE COMMUNITY GUIDE IN ACTION

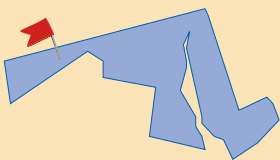
Worksite Wellness to Control Overweight and Obesity

The Dow Chemical Company (Dow) often uses findings and recommendations in The Community Guide to develop its worksite wellness programs. For example, to help control overweight and obesity among its 52,000 employees, Dow focuses on interventions to improve access to healthy foods. One strategy the company has implemented is to color code serving utensils in the cafeteria salad bar to help diners make healthier food choices. A green label indicates a food is a highly nutritious “go,” a yellow label cautions moderation, and a red label warns diners to “stop” before eating too much of a high-fat food. As one component in a comprehensive worksite health strategy, interventions like this have helped Dow save millions in healthcare costs.



Mobilizing Funding Support to Battle Overweight and Obesity

The Western Maryland Health System (WMHS) took aim at the increasing rates of adult and childhood obesity in its community through a comprehensive action plan focused on behavioral, social, and environmental change. WMHS used evidence-based findings and recommendations in The Community Guide to secure partnerships and funding for local activities, including a television “turn off challenge” and two walking groups. WMHS has found that using a combination of interventions and involving partners from different sectors of the community increases the likelihood that messages will take hold.



Read more on these and other stories in *The Community Guide in Action* series at www.thecommunityguide.org/CG-in-Action.

REFERENCES

¹Ogden CL, Carroll MD, Kit BK, Flegal KM. *Prevalence of Obesity in the United States, 2009–2010*. NCHS data brief, no 82. National Center for Health Statistics. 2012. Available at www.cdc.gov/nchs/data/databriefs/db82.pdf.

²National Heart, Lung, and Blood Institute. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*. NIH publication no. 98-4083. Bethesda, MD. 1998. Available at www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf.

³Ogden CL, Lamb MM, Carroll MD, Flegal KM. *Obesity and Socioeconomic Status in Adults: United States 1988–1994 and 2005–2008*. NCHS data brief, no 50. National Center for Health Statistics. 2010. Available at www.cdc.gov/nchs/data/databriefs/db50.pdf.

⁴Ogden CL, Carroll MD. *Prevalence of Obesity Among Children and Adolescents: United States, Trends 1963–1965 Through 2007–2008*. NCHS Health E-Stat. National Center for Health Statistics. 2010. Available at www.cdc.gov/nchs/data/hestat/obesity_child_07_08/obesity_child_07_08.htm.

⁵Flegal KM, Carroll MD, Kit BK, Ogden CL. Prevalence of obesity and trends in the distribution of body mass index among US adults, 1999–2010. *JAMA* 2012;307(5):491–497.

⁶Dalenius K, Borland E, Smith B, Polhamus B, Grummer-Strawn L. *Pediatric Nutrition Surveillance 2010 Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2012. Available at www.cdc.gov/pednss/pdfs/PedNSS_2010_Summary.pdf.

⁷Centers for Disease Control and Prevention. Vital Signs: State-specific obesity prevalence among adults—United States, 2009. *Morbidity and Mortality Weekly Report* 2010; 59(30):951–955.

⁸U.S. Surgeon General. *Overweight and Obesity: At a Glance*. U.S. Department of Health and Human Services. Available at www.surgeongeneral.gov/library/calls/obesity/fact_glance.html.

⁹Finkelstein EA, Trogon JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: Payer- and service-specific estimates. *Health Affairs* 2009;28(5):w822–w831.



WHAT WORKS

Obesity Prevention and Control

Evidence-Based Interventions for Your Community

TASK FORCE FINDINGS ON OBESITY

The Community Preventive Services Task Force (Task Force) has released the following findings on what works in public health to control overweight and obesity. These findings are compiled in The Guide to Community Preventive Services (The Community Guide) and listed in the table below. Use the findings to identify intervention strategies you could use for your community.




Legend for Task Force Findings: Recommended Insufficient Evidence Recommended Against (See reverse for detailed descriptions.)

INTERVENTION	TASK FORCE FINDING
Provider-Oriented Interventions	
Provider education	
Provider feedback	
Provider reminders	
Provider education with a client intervention	
Multicomponent provider interventions	
Multicomponent provider interventions with client interventions	
Interventions in Community Settings	
Interventions to reduce screen time	
Behavioral interventions to reduce screen time	
Mass media interventions to reduce screen time	
Technology-supported interventions	
Multicomponent coaching or counseling interventions to reduce weight	
Multicomponent coaching or counseling interventions to maintain weight loss	
Interventions in specific settings	
Worksite programs	
School-based programs	

Visit the “Obesity Prevention and Control” page of The Community Guide website at www.thecommunityguide.org/obesity to find summaries of Task Force findings and recommendations on what works to combat obesity. Click on each topic area to find results from the systematic reviews, included studies, evidence gaps, and journal publications.

UNDERSTANDING THE FINDINGS

The Task Force bases its findings and recommendations on systematic reviews of the scientific literature. With oversight from the Task Force, scientists and subject matter experts from the Centers for Disease Control and Prevention conduct these reviews in collaboration with a wide range of government, academic, policy, and practice-based partners. Based on the strength of the evidence, the Task Force assigns each intervention strategy to one of the categories below.

CATEGORY	DESCRIPTION	ICON
Recommended	There is strong or sufficient evidence that the intervention strategy is effective . This finding is based on the number of studies, how well the studies were designed and carried out, and the consistency and strength of the results.	
Insufficient Evidence	There is not enough evidence to determine whether the intervention strategy is effective. This does not mean the intervention strategy does not work. There is not enough research available or the results are too inconsistent to make a firm conclusion about the intervention strategy's effectiveness. The Task Force encourages those who use interventions with insufficient evidence to evaluate their efforts.	
Recommended Against	There is strong or sufficient evidence that the intervention strategy is harmful or not effective .	

Visit the "Systematic Review Methods" page on The Community Guide website at www.thecommunityguide.org/about/methods.html for more information about the methods used to conduct the systematic reviews and the criteria the Task Force uses to make findings and recommendations.

RESOURCES

You can use the following resources to guide the implementation of evidence-based strategies and put the Task Force findings to work.

- The Community Guide in Action: Stories From the Field**
Investing in Worksite Wellness for Dow Employees
www.thecommunityguide.org/CG-in-Action/Worksite-Dow.pdf

Mobilizing Funding Support to Battle Overweight and Obesity
www.thecommunityguide.org/CG-in-Action/Obesity-MD.pdf
- State and Community Programs for Obesity Control**
Centers for Disease Control and Prevention
www.cdc.gov/obesity/stateprograms
- CDC Prevention Research Center: Center for Training and Research Translation**
 University of North Carolina at Chapel Hill
www.center-trt.org
- Directory of Research Tested Intervention Programs (RTIPs)** 
 National Cancer Institute and Substance Abuse and Mental Health Services
rtips.cancer.gov/rtips
- Partnership for Prevention**
www.prevent.org/Topics/Worksite-Health.aspx
- Healthy People 2020 Interventions and Resources on Physical Activity**
 U.S. Department of Health and Human Services
www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=33