In 2015, over 30 million Americans had diabetes and an estimated 1.5 million new cases were diagnosed among adults aged 18 years or older. Diabetes is currently the seventh leading cause of death in the United States. Along with those who have been diagnosed with diabetes, there are an additional 84 million Americans who have prediabetes, which means that they are at increased risk of developing type 2 diabetes. One out of every three Americans have diabetes or prediabetes, and this percentage is growing.1

This fact provides proven intervention strategies—including programs and services—to develop successful diabetes prevention and control interventions. It can help decision makers in both public and private sectors make choices about what intervention strategies are best for their communities.

This fact sheet summarizes information in The Guide to Community Preventive Services (The Community Guide), an evidence-based resource of what works in public health. Use this information to select from the following intervention strategies you can adapt for your community to:

- Implement combined diet and physical activity promotion programs to prevent type 2 diabetes for people at increased risk. These can include counseling, coaching, or a combination of both.
- Develop case management interventions in order to coordinate and provide healthcare for all people affected by diabetes.
- Engage community health workers in diabetes prevention programs to improve glycemic control and weight-related outcomes for people at increased risk for type 2 diabetes.
- Develop intensive lifestyle interventions for patients with type 2 diabetes to improve glycemic control and support dietary modification, regular physical activity, and weight management.
- Develop team-based care interventions to help patients manage type 2 diabetes and improve blood glucose, blood pressure, and lipid levels.

The Community Guide provides evidence-based findings and recommendations from the Community Preventive Services Task Force (CPSTF) about preventive services and programs to improve health. The CPSTF—an independent, nonfederal panel of public health and prevention experts—bases its findings on systematic reviews of the scientific literature. Learn more about The Community Guide and what works to prevent and control diabetes by visiting www.thecommunityguide.org/topic/diabetes.
THE PUBLIC HEALTH CHALLENGE

The prevalence and incidence of diabetes is rising

- Over the last 20 years, the number of adults with diabetes has more than tripled as the American population has aged and become overweight and obese.²

- Risk factors for type 2 diabetes include being overweight, having a family history of diabetes, having gestational diabetes or having a baby weighing more than 9 pounds at birth.³

- Without weight loss and moderate physical activity, many people with prediabetes will develop type 2 diabetes within five years.³

Type 2 diabetes can often be prevented

- Eating smaller portions and healthy foods can help prevent or delay diabetes diagnoses.⁴

- Physical activity can help control blood glucose levels, weight, and blood pressure, as well as raise “good” cholesterol and lower “bad” cholesterol.⁵

- Losing just a small amount of weight (between 5 and 7 percent of total body weight) can prevent or delay type 2 diabetes for those who are at high risk for the disease.⁶

In 1994, the prevalence of diagnosed diabetes was less than 6% in most states. By 2015, there were 27 states with a prevalence of more than 9%.

Age-Adjusted Prevalence of Diagnosed Diabetes Among US Adults

**1994**

- Missing data
- 4.5–5.9%
- 7.5–8.9%

**2015**

- Missing data
- 4.5–5.9%
- 7.5–8.9%
- ≥9.0%

Source: www.cdc.gov/brfss

For more findings on diabetes in the U.S. or in your state, see www.cdc.gov/diabetes.
SUMMARIZING THE CPSTF FINDINGS

All CPSTF findings for diabetes prevention and control are available online at www.thecommunityguide.org/topic/diabetes. Some of the findings are described below.

- **Combined diet and physical activity promotion programs** are effective in reducing new-onset diabetes. These programs also improve diabetes and cardiovascular disease risk factors, including overweight, high blood glucose, and high blood pressure. They are designed to prevent type 2 diabetes among people who are at increased risk for the disease. Combined diet and physical activity programs actively encourage people to improve their diet and increase their physical activity.

- **Team-based care** is a health systems-level, organizational intervention that assigns a multidisciplinary team to help patients manage type 2 diabetes. Each team includes the patient, the patient’s primary care provider (not necessarily a physician), and one or more health professionals. The team helps patients get appropriate medical tests, use medications to manage risk factors, adhere to treatment, and make healthy behavior and lifestyle choices.

- **Interventions engaging community health workers for diabetes prevention** improves blood sugar control and weight-related outcomes for people at increased risk for type 2 diabetes. Community health workers are frontline public health workers who serve as a bridge between underserved communities and healthcare systems. Programs may include education about diabetes prevention and lifestyle changes, or counseling for people at higher risk for diabetes.

- **Intensive lifestyle interventions** helps type 2 diabetes patients improve glycemic control and reduce risk factors for cardiovascular disease. Patients with type 2 diabetes receive counseling and support to help them change their diet or level of physical activity. Programs provide ongoing counseling, coaching, or individualized guidance on dietary modifications, regular exercise, or both. Patients must interact with program staff multiple times over a period of six months or longer.

PUTTING THE CPSTF 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 CPSTF and determine which ones best match your needs. Adopt, adapt, or develop evidence-based diabetes prevention and control campaigns to support your programs and services.

- See how other communities have applied the CPSTF recommendations for diabetes prevention and control at www.thecommunityguide.org/content/the-community-guide-in-action. Get ideas from their Community Guide in Action stories.

- Explore CDC’s National Diabetes Prevention Program at www.cdc.gov/diabetes/prevention to learn more about their evidence-based lifestyle change program for preventing type 2 diabetes. Find out how federal agencies, community organizations, employers, insurers, and others work together to reduce diabetes.


- Visit the Society for Public Health Education (SOPHE) website at www.sophe.org/Sophe/PDF/Diabetes_toolkitrevised.pdf to access a toolkit designed to provide tips and resources for planning and promoting interventions designed to empower communities to reduce the risk of diabetes.

Combating Diabetes through Worksite Wellness Efforts

In 2010, the Maryland Department of Health and Mental Hygiene (DHMH) defined obesity and diabetes as priority health concern areas and launched an initiative focusing on worksite wellness across the state. Using findings from the Community Guide as a basis on which to assess and influence change in employees’ health, the DHMH developed a program called Healthiest Maryland. This program worked to create a culture of wellness in the workplace where the healthiest choice is an easy one. The DHMH used Task Force findings such as point-of-decision prompts to encourage stair use, worksite programs to control and reduce overweight and obesity, and diabetes disease management programs. Early results of the program show enthusiasm for Healthiest Maryland with more than 150 businesses, employing more than 180,000 employees, committed to the initiative. Read more on this story at www.thecommunityguide.org/stories/maryland-businesses-support-worksite-wellness-effort-combat-chronic-disease.

Putting it all Together: Preventing Diabetes with Clinical and Community-Based Evidence


FOR MORE INFORMATION

The Community Guide: Diabetes Prevention and Control
www.thecommunityguide.org/topic/diabetes

Diabetes Public Health Resource, CDC
www.cdc.gov/diabetes

Office of Disease Prevention and Health Promotion
U.S. Department of Health & Human Services
www.health.gov

National Diabetes Education Program
National Institute of Health
www.ndep.nih.gov

American Diabetes Association
www.diabetes.org

REFERENCES


The Community Preventive Services Task Force (CPSTF) has released the following findings on what works in public health to prevent cardiovascular disease. 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 strategies and interventions you could use for your community.

Legend for CPSTF Findings:  
- **Recommended**  
- **Insufficient Evidence**  
- **Recommended Against**  
(See reverse for detailed descriptions.)

### CPSTF FINDINGS FOR DIABETES PREVENTION AND CONTROL

For each intervention, a summary of the systematic review, included studies, evidence gaps, and journal publications can be found on the Diabetes Prevention and Control section of the website at [www.thecommunityguide.org/topic/diabetes](http://www.thecommunityguide.org/topic/diabetes). Other related resources include one pagers and Community Guide in Action stories.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>CPSTF Finding</th>
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<tbody>
<tr>
<td>Combined Diet and Physical Activity Promotion Programs to Prevent Type 2 Diabetes Among People at Increased Risk</td>
<td><img src="https://www.thecommunityguide.org/images/recommended.png" alt="Recommended" /></td>
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<tr>
<td>Intensive Lifestyle Interventions for Patients with Type 2 Diabetes</td>
<td><img src="https://www.thecommunityguide.org/images/recommended.png" alt="Recommended" /></td>
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<tr>
<td>Lifestyle Interventions to Reduce the Risk of Gestational Diabetes</td>
<td><img src="https://www.thecommunityguide.org/images/recommended.png" alt="Recommended" /></td>
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<td>Mobile Phone Applications Used Within Healthcare Systems for Type 1 Diabetes Self-Management</td>
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_The Centers for Disease Control and Prevention provides administrative, scientific, and technical support for the Community Preventive Services Task Force._
UNDERSTANDING THE FINDINGS

The CPSTF bases its findings and recommendations on systematic reviews of the scientific literature. With oversight from the CPSTF, 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 CPSTF assigns each intervention to one of the categories below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Icon</th>
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</thead>
<tbody>
<tr>
<td>Recommended</td>
<td>There is strong or sufficient evidence that the intervention strategy is <strong>effective</strong>. 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.</td>
<td></td>
</tr>
<tr>
<td>Insufficient Evidence</td>
<td>There is <strong>not enough evidence</strong> to determine whether the intervention strategy is effective. This does not mean the intervention 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 CPSTF encourages those who use interventions with insufficient evidence to evaluate their efforts.</td>
<td></td>
</tr>
<tr>
<td>Recommended Against</td>
<td>There is strong or sufficient evidence that the intervention strategy is <strong>harmful or not effective</strong>.</td>
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</tr>
</tbody>
</table>

EVALUATING THE EVIDENCE

- CPSTF findings are based on systematic reviews of all relevant, high-quality evidence. Systematic reviews are conducted in accordance with the highest international standards, using a transparent and replicable methodology that accounts for the complexities of real-world public health interventions.

- Systematic review science teams, coordinated by CDC scientists, evaluate the strengths and limitations of all relevant high-quality evidence to assess whether programs, services, and other interventions are effective in improving health at the population level.

- Review teams determine whether findings are applicable to different U.S. population groups and settings; highlights possible harms, potential benefits, and implementation considerations; and identifies evidence gaps and areas for future research.

- A separate team of economists conducts systematic economic analyses for recommended intervention approaches. They look at cost, cost effectiveness, and cost-benefit analyses to provide public health professionals with information they need to make decisions and allocate funding.

Visit the “Our Methodology” page on The Community Guide website at [www.thecommunityguide.org/about/our-methodology](http://www.thecommunityguide.org/about/our-methodology) for more information about the methods used to conduct the systematic reviews and the criteria the CPSTF uses to make findings and recommendations.