

## Screening for Type 2 Diabetes in Adults: U.S. Preventive Services Task Force Recommendations

*Summaries for Patients* are a service provided by *Annals* to help patients better understand the complicated and often mystifying language of modern medicine.

The full reports are titled “Screening for Type 2 Diabetes Mellitus in Adults: U.S. Preventive Services Task Force Recommendation Statement” and “Screening Adults for Type 2 Diabetes: A Review of the Evidence for the U.S. Preventive Services Task Force.” They are in the 3 June issue of *Annals of Internal Medicine* (volume 148, pages 846-854 and 855-868). The first report was written by the U.S. Preventive Services Task Force; the second report was written by S.L. Norris, D. Kansagara, C. Bougatsos, and R. Fu.

### What is the U.S. Preventive Services Task Force?

The U.S. Preventive Services Task Force (USPSTF) is a group of health experts that reviews published research and makes recommendations about preventive health care.

### What is the problem and what is known about it so far?

Diabetes mellitus is a common disease that interferes with the body's ability to store energy from food. The pancreas makes a substance called insulin, which helps to store energy from food. Type 1 diabetes (juvenile diabetes) occurs when the pancreas stops making insulin. In type 2 diabetes (adult-onset diabetes), the body makes plenty of insulin but is unable to use it normally. In both cases, the result is high blood sugar levels. Over time, high blood sugar levels can lead to blindness, kidney failure, nerve damage, and heart disease. Fortunately, good care with diet, exercise, and medications can prevent the development of complications. Good care includes treatment to keep blood sugar levels normal. People with diabetes have more heart attacks and strokes than people without diabetes. Controlling blood pressure and cholesterol helps to prevent these complications. For people with diabetes who also have high blood pressure and cholesterol problems, good care also includes treatment of these conditions. Type 1 diabetes usually does not go long before being diagnosed. However, many people with type 2 diabetes have diabetes for years before symptoms begin.

Testing people who have no symptoms to try to detect disease early is called *screening*. Screening for diabetes would be helpful only if people who begin treatment before symptoms develop do better than people who start treatment after symptoms develop. Screening for diabetes involves blood tests to look for high blood sugar levels.

### How did the USPSTF develop these recommendations?

The USPSTF reviewed published research to measure the benefits and harms of testing for diabetes in people with no symptoms.

### What did the USPSTF find?

The USPSTF did not find studies that prove that treating people with normal blood pressure and diabetes to lower blood sugar before they have symptoms leads to fewer diabetes complications (such as heart attacks, strokes, or kidney problems) than if treatment begins when symptoms develop. No studies have looked at the long-term harms of diabetes screening. Short-term harms include worry caused by labeling people as having diabetes and giving them diabetes treatments. However, the USPSTF did find studies that show that people with high blood pressure ( $>135/80$  mm Hg) and diabetes have fewer heart attacks and strokes if blood pressure is lowered below this level.

### What does the USPSTF suggest that patients do?

Patients with normal blood pressure ( $\leq 135/80$  mm Hg) should know that it is unclear whether screening for diabetes would help them. These patients should discuss diabetes screening with their doctors.

Patients with high blood pressure ( $>135/80$  mm Hg) should be screened for diabetes.

### What are the cautions related to these recommendations?

These recommendations do not apply to people who have symptoms that might be due to diabetes. Patients with symptoms should be tested for diabetes. The recommendations may change as new studies become available.

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