

Screening for Thyroid Dysfunction

The U.S. Preventive Services Task Force (Task Force) has issued a **final recommendation** statement on *Screening for Thyroid Dysfunction*.

This final recommendation statement applies to adults who are not pregnant and who show no signs or symptoms of thyroid dysfunction. The final recommendation statement summarizes what the Task Force learned about the potential benefits and harms of screening for thyroid dysfunction: There is not enough evidence to determine the potential benefits and harms of this screening in this population.

What is thyroid dysfunction?

Thyroid dysfunction is a range of disorders related to the thyroid gland. (A gland is an organ that makes chemical substances for the body.)

The thyroid is a butterfly-shaped gland in the neck that produces two hormones. These hormones control the rate of many activities in the body, such as how fast a person burns calories or how fast the heart beats.

Facts about the Thyroid and Thyroid Dysfunction

The thyroid gland works together with another gland in the body, the pituitary gland. The pituitary gland, a small gland in the brain, controls how much of two specific hormones are produced by the thyroid. The pituitary does this by releasing its own hormone, which is known as thyroid-stimulating hormone (TSH). The pituitary makes more TSH when levels of thyroid hormones in the blood are low. The pituitary makes less TSH when thyroid hormone levels are high.

Thyroid **dysfunction** refers to a range of changes in TSH levels, either above or below a pre-set level defined as "normal." These changes include:

- Subclinical hypothyroidism: The TSH level is above the "normal" level and thyroid hormone levels are normal.
- Overt hypothyroidism: The TSH level is above "normal" and thyroid hormone levels are too low.
- Subclinical hyperthyroidism: The TSH level is below "normal" and thyroid hormone levels are normal.
- Overt hyperthyroidism: The TSH level is below "normal" and thyroid hormone levels are too high.

People with thyroid dysfunction often do not have obvious symptoms. When symptoms do occur, they can include fatigue orhyperactivity, gaining or losing weight, or feeling cold or hot. However, these symptoms are very general. They can occur in many kinds of health conditions as well as in response to common situations people face in their daily lives, such as stress.

Thyroid **disease** happens when people with overt hypo- or hyperthyroidism have levels of thyroid hormones and TSH that stay above or below normal for a long time. Most importantly, these individuals also have ongoing symptoms that cannot be explained by any other cause. This final recommendation applies only to people with thyroid dysfunction, not thyroid disease.



Screening for Thyroid Dysfunction

Screening is done with a blood test that measures the amount of TSH in the blood. This test is known as a serum TSH test. Depending on the initial test results, a follow-up test may be needed.

The test can accurately identify a person's TSH level, but health care professionals do not always agree about what level is "abnormal," because abnormal levels may be different for different groups. For example, an abnormal level may be different for an older person than for a younger person. Also, abnormal results on a TSH test can be caused by non-thyroid illnesses or medications. Abnormal levels can even return to normal on their own.

Potential Benefits and Harms of Screening for Thyroid Dysfunction

The Task Force reviewed studies on the potential benefits and harms of screening for thyroid dysfunction in adults who are not pregnant and who do not show signs or symptoms of the condition. They did not find evidence on whether this screening has long-term health benefits.

The Task Force also did not find direct evidence about the potential harms of thyroid screening. However, potential harms can include false-positive test results (a result that says a condition exists when, in fact, it does not) and overtreatment (treating an abnormal TSH level that may return to normal on its own or that would have never caused health problems on its own).

The Final Recommendation on Screening for Thyroid Dysfunction: What Does It Mean?

Here is the Task Force's final recommendation on screening for thyroid dysfunction. It is based on the quality and strength of the evidence about the potential benefits and harms of screening for this purpose. Task Force recommendation grades are explained in the box at the end of this fact sheet.

When there is not enough evidence to judge benefits and harms, the Task Force does not make a recommendation for or against—it issues an **I Statement.** The Notes explain key ideas.

Visit the Task Force Web site to read the full **final recommendation statement**. The statement explains the evidence the Task Force reviewed and how it decided on the grade. An **evidence document** provides more detail about the studies the Task Force reviewed.

1 The Task Force concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for thyroid dysfunction in nonpregnant asymptomatic adults. I Statement

Notes

1 current evidence is insufficient

The Task Force did not find enough information from studies to determine the potential benefits and harms of screening in this population.

thyroid dysfunction Producing too much or not enough TSH or thyroid hormones.

asymptomatic

Showing no signs or symptoms.

Should You Be Screened for Thyroid Dysfunction?

Getting the best health care means making smart decisions about what screening tests, counseling services, and preventive medicines to get and when to get them. Many people don't get the tests or counseling they need. Others get tests or counseling they don't need or that may be harmful to them.

Task Force recommendations can help you learn about screening tests, counseling services, and preventive medicines. These services can keep you healthy and prevent disease. The Task Force recommendations do not cover diagnosis (tests to find out why you are sick) or treatment of disease. Task Force recommendations also apply to some groups but not others. For example, this recommendation does not apply to pregnant women.

Deciding Whether to Get Screened for Thyroid Dysfunction

If you are concerned that you may be at risk for thyroid dysfunction, talk with your doctor or nurse about your concerns and whether a screening test may be right for you. Consider your own health and lifestyle. Think about your personal beliefs and preferences for health care. And consider scientific recommendations, like this one from the Task Force.



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

The Task Force is an independent, volunteer group of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medicines. The recommendations apply to people with no signs or symptoms of the disease.

To develop a recommendation statement, Task Force members consider the best available science and research on a topic. For each topic, the Task Force posts draft documents for public comment, including a draft recommendation statement. All comments are reviewed and considered in developing the **final recommendation statement**. To learn more, visit the **Task Force Web site**.

Task Force Recommendation Grades	
Grade	Definition
А	Recommended.
В	Recommended.
С	Recommendation depends on the patient's situation.
D	Not recommended.
I statement	There is not enough evidence to make a recommendation.

