

Phenytoin



Does this test have other names?

Dilantin test

What is this test?

This test checks the level of the seizure medicine phenytoin (Dilantin) in your blood. Phenytoin is an anticonvulsant medicine given to control seizures.

Why do I need this test?

You may need this test if you take phenytoin. Your healthcare provider must check your blood to make sure you are getting the correct dose. Too much can be toxic. Not enough leaves your seizures uncontrolled.

You may have this test more often when you first start taking the medicine and then regularly throughout treatment. You may need to repeat the test if the medicine doesn't seem to control your seizures or if any of your other prescription medicines change.

What other tests might I have along with this test?

Your healthcare provider also might order other blood tests, including:

- Complete blood count
- Blood urea nitrogen and creatinine test to check kidney function
- Liver function tests
- Glucose test to measure your blood sugar because phenytoin can cause your blood sugar to rise
- Blood tests to measure the sodium level in your blood
- Tests for other medicine levels
- Urinalysis

What do my test results mean?

Test results may vary depending on your age, gender, health history, and other things. Your test results may be different depending on the lab used. They may not mean you have a problem. Ask your healthcare provider what your test results mean for you.

Results are given in micrograms per milliliter (μmL). The normal therapeutic range for children and adults is 10 to 20 μmL (8 to 15 μmL in newborns). The therapeutic range is just a guide. Your healthcare provider will figure out the best dose and blood level for you based in part on how well your seizures are controlled and how you feel. High levels of phenytoin in your blood can be toxic.

How is this test done?

The test is done with a blood sample. A needle is used to draw blood from a vein in your arm or hand.

Does this test pose any risks?

Having a blood test with a needle carries some risks. These include bleeding, infection, bruising, and feeling lightheaded. When the needle pricks your arm or hand, you may feel a slight sting or pain. Afterward, the site may be sore.

What might affect my test results?

Adjusting the dosage of any other medicine or taking a new medicine—prescription or nonprescription—can affect the level of phenytoin in your blood.

Tell your healthcare provider if you are taking any of these medicines:

- Amiodarone for an irregular heartbeat
- Chlordiazepoxide or diazepam for anxiety
- Warfarin, a blood thinner
- Disulfiram to treat alcohol abuse
- Estrogens for hormone replacement
- Aspirin and medicines with salicylates
- Sulfonamides to treat infections
- Tolbutamide used for diabetes management
- Omeprazole or famotidine for ulcers
- Isoniazid, an antibiotic
- Methylphenidate for attention deficit hyperactivity disorders
- Phenothiazines for nausea
- Fluoxetine or trazodone for depression
- Carbamazepine, primidone, or valproic acid for seizures
- Fluconazole for yeast infections

Drinking alcohol also can raise the level of phenytoin in your blood. A change in metabolism also can affect your phenytoin levels. Before taking a new prescription or an over-the-counter medicine, it's best to check about medicine interactions with your healthcare provider or pharmacist.

How do I get ready for this test?

You don't need to prepare for this test. Be sure your healthcare provider knows about all medicines, herbs, vitamins, and supplements you are taking. This includes medicines that don't need a prescription and any illegal drugs you may use.

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