

Culture and Sensitivity Testing

Why am I having this test?

Culture and sensitivity testing is used by your health care provider to:

- Help diagnose an infection if you have symptoms of an infection.
- Identify a targeted treatment so you can get better faster.

What is being tested?

In this test, a health care provider will take a tissue sample or fluid sample from your body and test it in a lab to see if germs will grow in it. Any germs that grow from the culture will be tested against a variety of medicines to find which medicine works best (*sensitivity testing*). For example, for an infection that is caused by bacteria, several types of antibiotic medicines may be tested.

What kind of sample is taken?

A culture can be performed on a variety of samples from the body, such as:

- Blood. Two samples are usually collected from two different sites on the body. These samples are collected by inserting a needle into a blood vessel.
- Urine. A urine sample is collected in a germ-free (*sterile*) container that is provided to you by the lab. You may collect a clean-catch sample at home or at the lab. Your health care provider may give you sterile wipes to clean your vagina or penis to prepare for collecting a clean-catch sample.
- Lung secretions (*sputum*). This is usually collected by having you cough into a sterile container that is provided to you by the lab.
- Wound and soft tissue. A sample is usually collected by swabbing the fluid that is coming from your wound.



How do I collect samples at home?

- You may be asked to collect a urine sample at home. The urine must be collected in a way that prevents the bacteria that is always on the skin (*normal flora*) from getting into the sample. When collecting your sample, make sure you:
 - Use the supplies and instructions that you received from the lab.
 - Collect urine only in the sterile cup that you received from the lab.
 - **Do not** let any toilet paper or stool (*feces*) get into the cup.
 - Refrigerate the sample until you can return it to the lab.
 - Return the sample to the lab as instructed.
- You may be asked to collect a sputum sample at home. It is important to collect sputum from the lungs and not saliva from your mouth. This can be done by taking several slow, deep breaths, then coughing deeply to bring up sputum from the lungs. Your health care provider will tell you if there are other special instructions for collecting the sputum. When collecting your sample, you may be asked to:
 - Not eat or drink anything prior to collecting a sputum sample.
 - Rinse your mouth with water before collecting the sample to decrease contamination.

How do I prepare for this test?

Preparation for the test will vary depending on the type of fluid or tissue that is being cultured. Follow the directions that are provided by your health care provider.

How are the results reported?

Your test results will be reported as either positive or negative for bacteria.

- If enough bacteria grow from your culture, your test result is considered positive.
- If many different bacteria grow from your culture, your test result may be reported as contaminated. The test may need to be repeated.
- If no bacteria grow from your culture after 24–48 hours, your test result is considered negative.

What do the results mean?

If the results are negative, this means:

- It is unlikely that you have an infection.
- Your test may be repeated if you still have symptoms.

If the results are positive, this means:

- It is likely that you have an infection.

Results of sensitivity testing let your health care provider know which medicines to use in treating your infection.

Talk with your health care provider about what your results mean.

Questions to ask your health care provider

Ask your health care provider, or the department that is doing the test:

- When will my results be ready?
- How will I get my results?
- What are my treatment options?
- What other tests do I need?
- What are my next steps?

Summary

- Culture and sensitivity testing is performed to help diagnose an infection. It may also help your health care provider decide which medicines to use in treating your infection.
- This test involves taking a tissue or fluid sample from your body and testing it to see if germs will grow in it. Samples may come from blood, urine, sputum, or a wound site.
- If enough bacteria grow from your culture, your test result is considered positive. This means that you likely have an infection.
- If no bacteria grow from your culture after 24–48 hours, your test result is considered negative. This makes it unlikely that you have an infection.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.