

Fungal Culture

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- Performing a fungal culture test poses minimal risk to your pet, and in many cases, the information your veterinarian gains from this test is very valuable.

What Is a Fungal Culture Test?

A fungal culture test is a method of identifying a specific fungus that is infecting an animal. Fungal infections are relatively common in cats and dogs and include conditions such as ringworm. Ringworm can cause hair loss, itching, and a skin rash, but in most cases it is treatable and not life threatening. However, there are other fungal infections that can cause serious illness (such as pneumonia) and death in cats and dogs.

Fungal organisms can enter the body in several ways. Sometimes, they can be inhaled or can invade the body through wounds in the skin. Ringworm is transferred from pet to pet (and from pets to people) through direct contact or contact with contaminated objects such as bedding. Once a fungus infects the body, it sometimes spreads to other areas. Ringworm tends to affect only the skin. However, other fungal organisms can infect the nasal passages, lungs, kidneys, liver, brain, and lymph nodes.

As with any other diagnostic test, results of a fungal culture test must be combined with physical exam findings, a medical history, and other information to assess your pet's health status and determine the best treatment plan.

How Is a Fungal Culture Test Performed?

Performing a fungal culture test involves putting a sample of the fungal organism into a special substance (called *culture medium*) and allowing it to grow for a period of time so that the fungal species can be identified.

To perform a fungal culture test, your veterinary team must obtain a sample of the suspected fungal organism from your pet. Many types of fungi can

infect dogs and cats, so the type of sample that must be obtained can vary. For example, ringworm is commonly diagnosed by taking hair or skin flakes from an affected area. However, if a fungal organism has invaded the respiratory tract (nasal passages, airways, lungs), samples may include mucus from the nose or a biopsy sample taken from the affected area.

If a fungus has invaded another area of the body (such as the liver, spleen, or lymph nodes), biopsy samples from these tissues, bone marrow samples, blood samples, or other tissue and fluid samples may be needed for fungal culture testing.

Once the test sample is obtained and placed into a culture medium, the specimen is submitted to a diagnostic laboratory for continued processing and identification of the organism. For ringworm, some veterinarians can perform the fungal culture testing in their office. Either way, results are generally available within 3 to 10 days, depending on the organism and testing procedures.

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What Does a Fungal Culture Test Tell Your Veterinarian?

Because there are so many types of fungal organisms that can affect dogs and cats, fungal culture testing is a good way to identify the exact species present and help select the most appropriate medication to treat the infection.

What Is a Fungal Culture Test Used For?

In many cases, a fungal infection can look like another type of disease or infection. Performing a fungal culture test helps your veterinarian determine if the problem is really a fungal infection or another

type of infection, perhaps one caused by a bacteria or virus.

Often, a fungal infection occurs along with another type of illness. For example, if a dog has a bacterial skin infection, the damage to the skin can allow a fungal organism to invade the area and become part of the problem. This is commonly referred to as an *opportunistic infection*, meaning that the fungal organism took advantage of the existing skin problem to set up its own infection. Ear infections are also commonly accompanied by opportunistic fungal infections. Similarly, if a pet's immune system is not functioning properly due to another medical problem, an opportunistic fungal organism can invade the body. Because fungal infections can be opportunistic, finding fungi in a culture test does not necessarily confirm a fungal infection as the primary problem. Your veterinarian will interpret this information along with clinical signs, medical history, and perhaps other diagnostic testing (such as x-rays, blood work, or bacterial culture testing) to confirm a diagnosis.

Are There Risks Associated with Performing a Fungal Culture Test?

Very few risks are associated with performing a fungal culture test, and your veterinary team will take precautions to ensure that your pet is not injured while a sample for the culture is being obtained. In the case of ringworm, sampling may simply involve plucking a few hairs from your pet or scraping the surface of the skin. If sedation is necessary (as for a biopsy), your veterinarian may recommend additional blood work or preanesthetic evaluation before proceeding. Your pet will be monitored closely while sedated to help ensure a safe recovery.

Once the culture specimen is obtained, all further processing is performed at the veterinarian's office or at a diagnostic laboratory, so there is no risk of harm to your pet.

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