**Stages of Heartworm Infection**

While [potentially fatal if untreated](https://www.petcarerx.com/article/what-happens-when-you-dont-treat-heartworm/240), heartworm symptoms can be initially quite mild. Early in the disease’s progression, there may not be any symptoms present at all, which is part of what makes heartworm such a difficult disease to diagnose. It is because of these reasons that monthly treatment with a preventative, like [Heartgard for dogs,](https://www.petplus.com/products/heartgard-for-dogs)[Iverhart Max](https://www.petplus.com/products/iverhart-max), or [Trifexis](https://www.petcarerx.com/trifexis/22843%22%20%5Ct%20%22_blank)is so important.

As with [cancer](https://www.petplus.com/conditioncenter/dog/canine-cancer), heartworm disease is divided up into four stages. The mild [cough](https://www.petcarerx.com/article/dog-coughing-and-what-it-might-mean/1346) of stage one or two progresses into a persistent cough by stages three and four. Without treatment, the symptoms become increasingly disruptive and severe, and the impact on a dog’s lungs and heart is negative. Your dog’s stage of heartworm disease – as well as other considerations like age and health – will play a major role in determining your veterinarian’s approach to treatment.

The primary observable heartworm symptoms are a cough that just won’t seem to go away, [difficulties breathing](https://www.petcarerx.com/article/how-to-perform-cat-or-dog-cpr/1358), being tired after [exercise](https://www.petcarerx.com/article/joint-health-for-dogs-starting-an-exercise-routine/104), and at a certain point, a reluctance to exercise at all. Below, see how symptoms match to each of the progressively more entrenched stages of the disease.

STAGE 1

During the first stage of heartworm disease, dogs generally will not have any symptoms at all, although you may notice a slight cough. This is a very mild stage, and dogs will appear happy and healthy. Even with a physical, this disease is difficult to detect, and blood tests may come back with a negative result for heartworm disease. Heartworm Antigen tests can only detect the presence of a heartworm after it has matured which takes approximately six months. It is for this reason it is not advised to test a dog younger than 6 months of age for heartworms. Premature testing and a negative result at this early stage of infection could lull an owner into a false sense of health and safety.

STAGE 2

Stage two of heartworm disease is accompanied by moderate symptoms such as a [lingering cough](https://www.petcarerx.com/article/using-temaril-p-for-dogs-as-kennel-cough-treatment/1635) or fatigue after exercise. The symptoms may now be advanced enough for you to detect them. During this phase, the impact of the heartworms on a dog may show in tests.

STAGE 3

By stage three, the disease is having a real impact on your dog’s health, and the heartworm symptoms are correspondingly more severe and noticeable. Dogs will continue to cough, will experience fatigue after exercise, may be reluctant to exercise, and can have trouble breathing. During this stage, dogs may also cough up blood. By stage three, the disease is quite evident on x-rays.

STAGE 4

Dogs in stage four of the disease have very visible heartworm symptoms, which are accompanied by long-term implications for the dog’s health. As in other stages, dogs will be reluctant to exercise, tired after exercising, and will exhibit a cough. Dogs will probably experience trouble breathing as well. Testing may reveal the impact of the disease in the form of abnormal lung sounds within the dog’s lungs, an [enlarged liver](https://www.petcarerx.com/article/cat-and-dog-liver-shunt-treatment-and-prevention/1646), and heart noises. Untreated, this stage of heartworm disease can lead to [death](https://www.petcarerx.com/article/10-tips-for-explaining-pet-death-to-children/1559).

At each stage of the disease, [treatment methods](https://www.petcarerx.com/article/how-to-treat-heartworm-in-dogs/213) become increasingly more severe and invasive. Be mindful of your dog’s typical behavior, so that potential symptoms like a reluctance to exercise or extended lethargy don't get overlooked. Taking [heartworm medication](https://www.petcarerx.com/article/heartworm-medicine-for-dogs-and-cats-comparison-chart/536) has a good success rate at keeping larval infections from maturing into adult heartworms, especially when augmented by annual heartworm tests to detect signs of the disease.