



## PLEURAL EFFUSION

### ABOUT THE DISEASE

**Pleural effusion** is defined as fluid present within the chest cavity around the lungs but not inside the lungs. This often causes respiratory distress due to the lungs inability to fully inflate, which can lead to an inability to oxygenate properly. Different types of effusion (fluid) can be present within the chest depending on the underlying cause of the disease.

Types of fluid include:

- Exudate → cloudy fluid most commonly caused by infection or neoplasia
- Chylous fluid → contains lipids (fat) and cholesterol commonly caused by cardiac disease, heartworm infection, lymphatic obstruction, or other unknown causes
- Transudate → clear or straw-colored fluid that can be caused by liver failure, renal failure, gastrointestinal disease, heart failure, or neoplasia
- Hemorrhagic → blood in the chest is most commonly caused by bleeding disorders, neoplasia, trauma, and lung-lobe torsions

Clinical signs include fast breathing, difficulty breathing, movement of the abdomen during breathing, increased effort to breath, and blue gum color (cyanosis).

### OBTAINING A DIAGNOSIS

A thorough clinical history and physical examination with a veterinarian will yield a presumptive diagnosis. However, x-rays (radiographs) or ultrasound are the diagnostics of choice.

Introducing a small needle into the chest (thoracocentesis) can be performed to obtain a sample of the fluid, which will aid in diagnosis, but may require laboratory testing.

### TREATMENT

Patients with **pleural effusion** are often hospitalized and placed on oxygen. A therapeutic thoracentesis is performed to remove large amounts of fluid from the chest cavity. In some circumstances, patients require indwelling chest tubes to allow evacuation of fluid as it develops.

Long term prognosis is often guarded, as management is supportive rather than curative.

### TIPS FOR SUCCESS

- Seek early examination when patients are breathing fast, breathing hard, lethargic, or seem in distress.
- There is not always one simple management, and some patients require several treatments to ensure success and resolution of their underlying disease.