Dehydration occurs when the total body water is less than normal. Usually it involves loss of both water and electrolytes, which are minerals such as sodium, chloride and potassium. Dehydration is caused by either a lack of food or water intake or an increase in water loss through illness or injury. A fever further increases the loss of water.

When there is not enough body water, fluid shifts out of the body cells to compensate, leaving the cells deficient in necessary water. This leads to dehydration. The severity of the dehydration is based on the magnitude of these body water shifts. Dogs lose fluid through: breathing, panting, elimination, diarrhea, vomiting, fever and evaporation through the feet and other body surfaces. Dogs replenish fluid by drinking water or other liquids and by eating moist foods.

**Beginning Signs**
- Visibly tired
- Slowed pace/ Less animation
- Excessive panting, signs of warmth
- Changes in attitude (i.e. appears more apprehensive)
- Eyes appear sunken and lack moisture
- Dry mouth, gums, nose

**Intermediate Signs**
The skin loses elasticity- Pinch a little skin between your thumb and forefinger on your dog's back. When you release it, it should pop back into place immediately. As the tissue under the skin loses moisture, the skin moves back more slowly. In extreme cases, the skin doesn't pop back.

Delayed capillary refill time- Place your index finger firmly against the gums so that they appear white. Remove your finger and see how quickly the blood returns to the gums. The time it takes for the gums of a dehydrated dog to return to their pink state will be slower than normal.
- Rectal temperature remains > 105° F

**Final Signs**
- Weak in the hind end
- Wobbly and unsteady on feet

**Tips To Avoid Dehydration**
*Maintaining a constant fluid level is as important in dogs as it is in humans.*
1. Dogs lose a lot of water while panting. Leave two or three bowls filled with water around the house, so that he gets enough to drink.

2. If he has not had a good drink for a long time, start re-hydration slowly ... allowing your dog a few sips every few minutes. Overdrinking after a dry spell can quickly lead to vomiting and he
may end up losing more fluids than he had.

3. Don't let your dog drink excessive amounts of water after a strenuous exercise session.

4. Wait a few minutes after your dog has exerted in very heavy exercise and then allow frequent but small amounts every few minutes.

5. If your dog is showing some signs of dehydration, give him electrolyte mixed in water. While water helps in replenishing a lot of nutrients, electrolyte can do the job more quickly.

6. Dogs who have gone a long time without water have a problem holding it down. So let him lick ice, he hydrates himself with licking the ice.

7. If your dog refuses to drink for any extended period of time, consult your veterinarian immediately!

**Diagnosis**

Blood tests such as a complete blood count and biochemistry profile are important to try to find the underlying cause of the dehydration but may not reveal if dehydration is present.

The most important tests are a packed cell volume and total blood protein test. These tests are done on a blood sample and can help reveal if dehydration is present. If the packed cell volume and total protein are elevated, dehydration is present.

Determining the concentration of the urine can also help determine if the pet is dehydrated and if the kidneys are affected.

**Treatment**

The treatment for dehydration is to supplement the body with fluids. It is often not possible for an ill pet to ingest sufficient water to correct dehydration. Fluids are typically administered as an injection. The most efficient method of rehydration is through intravenous fluids. This requires hospitalization as well as an intravenous catheter.

Fluid replacement is done slowly to allow the body to compensate and slowly replenish tissues starved of fluid.

*This document is being provided for informational purposes only and is not intended as veterinary counsel. If you think your dog is dehydrated, seek veterinary counsel immediately.*