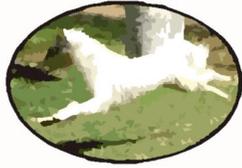


## Amazing Aussies



Lethal White Rescue of Arizona

## What Are Lethal Whites?

The following information is intended to help people understand exactly what is meant by the term “Lethal White”, when used to describe an Australian Shepherd.

“Lethal White” does not refer to lethal genetics, i.e, the pup being born dead, or dying soon after birth. Instead the term has been used to mean the same as “Double Merle” or “Homozygous Merle/White”. The name “Lethal White” in reference to Aussies stems from the fact that these white pups have historically been destroyed at birth because of the likelihood they may be blind, deaf or both. For these pups, being born white is lethal for them.

To accurately describe the double merle genetics, understanding a little about the merle gene is necessary. Aussies come in two acceptable colors:

- Solid (*m*)
- Merle (*M*).

The merle gene is dominant and is represented by the capital “*M*”, and the solid is recessive, represented by the small “*m*”. An Aussie has a combination of these two genes. The combination may be *mm*, *Mm*, or *MM*. A dog with the “*mm*” gene is a solid-colored dog (**such as black or red tri**). “*Mm*” is a heterozygous (meaning mixed) gene and will produce a merle (**such as blue or red merle**) colored dog. “*MM*” is the homozygous (meaning like) merle gene, and will produce a pup that is mostly white, and usually deaf and/or blind. This is the “Lethal White” Aussie.

Lethal Whites can only result from a merle to merle breeding, but not every puppy in the litter is a homozygous (*MM*) white. Statistics indicate that approximately 25% of the litter will be homozygous pups. The pups may show signs of deafness, blindness or a combination of the two, however it should be noted that some pups with this gene can hear and see. Those pups are the lucky ones. The defects can vary from minor vision and hearing loss to complete deafness and blindness. Double merles can also be born without eyes, or eyes that have failed to develop properly. These pups are almost always predominantly white. It is possible however, to have a “normally” marked merle that carries the double merle gene (*MM*).

The negative aspects of this syndrome are congenital and are usually evident when the eyes and ears open. If a dog appears normal between the ages of 6 to 12 months, they should not develop problems specifically related to the double merle gene (*MM*). However, it should be noted here that because of the genetics, the eyes will be more sensitive than

regular eyes, and should be monitored. Depending on the condition of the eyes, problems can develop later in life and it is possible that these dogs could lose some or all of their vision.

If you don't want to produce homozygous merles, it's real simple--never breed merle to merle. If you want to keep a homozygous merle, you had better be willing to devote yourself to keeping them safe from dangers that cannot be heard or seen for the length of their life.

The goal of Amazing Aussies is to educate the general public, and encourage anyone interested in adding an Australian Shepard to their home to consider the dangers of the merle to merle breeding. The Lethal White Aussie is just as loving and capable as a "normal" Aussie with the exception of the need for extra attention in living with special needs.

**Lethal White Aussies can compete in open agility competitions even when deaf or visually impaired. They can also become Certified Therapy Dogs.** For the most part, a Lethal White Aussie can do almost everything a normal Aussie can do!

Training for a special needs dog of any breed can be done as successfully and easily as any "normal" dog. All it takes is a loving and caring family.

For more information and links to related sites, please visit our web site at:

[www.amazingaussies.com](http://www.amazingaussies.com)