

MDR1 in Australian Shepherds: A Simple Guide for Dog Owners

What is MDR1?

Some Australian Shepherds have a gene mutation called MDR1. This makes them extra sensitive to certain medications.

Their bodies can't remove these drugs from the brain properly, which can lead to serious side effects.

How Common Is It?

✓ About 1 in 2 Aussies carries the MDR1 gene.
It's very common

Why It Matters

If your Aussie has the MDR1 gene, they may react badly to some everyday medications. Even small doses can cause problems.

Medications to Watch Out For

- Ivermectin (high doses – used for deworming)
 - Loperamide (Imodium – diarrhea treatment)
 - Acepromazine (sedative)
 - Butorphanol (pain relief or cough suppressant)
- Certain chemo drugs (Doxorubicin, Vinblastine, Vincristine)
 - Some antibiotics (Erythromycin, Rifampin)
- ★ Heartworm prevention (low-dose ivermectin) is usually safe.

What You Can Do

DNA Test: Ask your vet or breeder about MDR1 testing.

Tell Your Vet: Always share MDR1 info before giving meds.

Use Alternatives: Safer options are available for most drugs.

Watch for These Symptoms After Medication:

Weakness or wobbliness

Confusion or acting “off”

Shaking or tremors

Seizures

Sudden blindness

Extreme tiredness

Collapse or death (rare but serious)

Get vet help immediately if you see these signs.

Quick Recap

✓ MDR1 is very common in Aussies.

✓ Some meds can be dangerous.

✓ Testing and vet awareness can prevent problems.

With the right care, your dog can live a normal, happy life.