## DO NOT USE DRUGS FOR AUSTRALIAN SHEPHERDS!

Compiled by Nannette Newbury

The following list is compiled from the Rough Collie Council of the U.K. and the Washington State University websites.

It has taken years, but we now "scientifically" know that herding breeds can be sensitive to certain drugs (MDR1). However the MDR1 gene test ONLY focuses on drugs that are known to be pumped out of the brain by P-glycoprotein, the protein encoded by the MDR1 gene. Therefore the MDR1 test is only a tool.

It is wise to treat all Australian Shepherds as though they are carriers (Mutant/Mutant). Australian Shepherds without the MDR1 gene (Normal/Normal) have had severe reactions to the list of drugs below. **NOTE:** The drugs on the list are also distributed in "generic" forms with different names (i.e., Metronidazole is the same as Flagyl).

MANY other drugs can cause severe, even deadly reactions in the herding breeds, most having to do with the Central Nervous System disorders including encephalitis, seizures, etc. The reactions may not be immediate...they may even take years to manifest. The list of these drugs has been compiled with the help of breeders and owners over many years who have personally experienced the disastrous results.

I have combined the two lists for ease of use. If the drug has an asterisk (\*) after it, it is from *Washington State University* (MDR1) and is on their "problem" drug list. If the drug is on both lists there will be two asterisks (\*\*). All others are solely from the *Rough Collie Council of the U.K.* 

Acepromazine**	Diltiazem	Itraconazole	Phenothiazines
Aldosterone	Domperidone	Ketoconazole	Phenytoin
Amitriptyline	Doxorubicin**	Loperamide**	Quinidine
Antiemetics	Doxycycline	Losartan	Ranitidine
Apomorphine*	Ebastine	Methylprednisolone	Rifampin
Buprenorphine	Erythromycin	Metoclopramide	Rifamicin
Butorphanol**	Estradiol	Metronidazole	Selamectin**
Chinidin	Etoposide	Milbemycin**	Sparfloxacin
Cimeditine	Fentanyl	Mitoxantrone	Tacrolimus
Cortisol	Fexofenadine	Morphine	Tetracycline
Cyclosporin A	Grepafloxacin	Moxidectin**	Verapamil
Dexamethasone	Hydrocortisone	Ondansetron	Vinblastine**
Digoxin	Ivermectin**	Paclitaxel**	Vincristine**

**Please Note**: Not every Australian Shepherd will have a negative or deadly reaction to the drugs listed above. However enough of them have had severe reactions and/or died to warrant caution. YOU must be an advocate for your Australian Shepherd.

If you have an Australian Shepherd that becomes severely neurologically impaired after being administered one of the drugs above and does not survive...please consider making arrangements for a brain and spine necropsy.

If you like send the results of the brain necropsy to <u>stonepine@hughes.net</u> so we can continue to store the anecdotal results in one location.

Washington State University: (<a href="https://vcpl.vetmed.wsu.edu/problem-drugs">https://vcpl.vetmed.wsu.edu/problem-drugs</a>)
Rough Collie Council of the U.K.:(<a href="https://www.roughcolliebreedcouncil.co.uk/health/drugsensitivity.html">https://www.roughcolliebreedcouncil.co.uk/health/drugsensitivity.html</a>)