



Australian Government

Department of Agriculture, Fisheries and Forestry

Horse residue testing annual datasets 2023-24

National Residue Survey (NRS), Department of Agriculture, Fisheries and Forestry

Dataset abbreviations

LOR Limit of reporting.

MRL Maximum Residue Limit.

no limit No Australian standard applicable for the contaminant. The 'as low as reasonably achievable' principle applies. Detections at low levels are allowable.

not defined Standards are not defined in inedible matrixes (urine, retina and faeces).

not set No Australian standard has been set for the chemical in the edible matrix and any detection is a contravention of the Australia New Zealand Food Standards Code.

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Table 1: ANTHELMINTICS

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to $\leq\frac{1}{2}\text{MRL}$	> $\frac{1}{2}\text{MRL}$ to $\leq\text{MRL}$	>MRL
abamectin	Fat	0.005	not set	2	0	0	0
albendazole	Liver	0.001	not set	3	0	0	0
clorsulon	Liver	0.08	not set	3	0	0	0
closantel	Liver	0.05	not set	3	0	0	0
derquantel	Fat	0.001	not set	2	0	0	0
doramectin	Fat	0.005	not set	2	0	0	0
emamectin	Fat	0.002	0.01	2	0	0	0
eprinomectin	Fat	0.005	not set	2	0	0	0
fenbendazole	Liver	0.001	not set	3	0	0	0
fenbendazole sulfone	Liver	0.001	not set	3	0	0	0
flubendazole	Liver	0.002	not set	3	0	0	0

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
fluensulfone	Fat	0.01	0.01	2	0	0	0
ivermectin	Fat	0.005	0.01	2	0	0	0
levamisole	Liver	0.001	1	3	0	0	0
mebendazole	Liver	0.005	0.02	3	0	0	0
mebendazole, 5-hydroxy-	Liver	0.005	not set	3	0	0	0
milbemectin	Fat	0.01	0.002	2	0	0	0
monepantel sulphone	Fat	0.005	not set	2	0	0	0
morantel	Liver	0.001	not set	3	0	0	0
moxidectin	Fat	0.005	not set	2	0	0	0
nitroxynil	Liver	0.012	not set	3	0	0	0
oxfendazole (fenbendazole sulfoxide)	Liver	0.001	3	3	0	0	0
oxibendazole	Liver	0.001	not set	3	0	0	0
oxyclozanide	Liver	0.005	not set	3	0	0	0
parbendazole	Liver	0.001	not set	3	0	0	0
praziquantel	Fat	0.005	not set	2	0	0	0
rafoxanide	Liver	0.01	not set	3	0	0	0
spinetoram	Fat	0.005	2	2	0	0	0
spinosad	Fat	0.005	2	2	0	0	0
thiabendazole	Liver	0.004	0.2	3	0	0	0

Table 2: ANTIBIOTICS

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
AHD	Retina	0.002	not defined	3	0	-	-
amoxicillin	Kidney	0.01	0.01	4	0	0	0
AMOZ	Retina	0.002	not defined	3	0	-	-
ampicillin	Kidney	0.01	0.01	4	0	0	0
AOZ	Retina	0.002	not defined	3	0	-	-
apramycin	Kidney	0.05	2	4	0	0	0
avilamycin	Kidney	0.05	not set	4	0	0	0
benzyl G penicillin	Kidney	0.01	0.06	4	0	0	0
ceftiofur (desfuroylceftiofur)	Kidney	0.1	not set	4	0	0	0
cefuroxime	Kidney	0.05	not set	4	0	0	0
cephalonium	Kidney	0.05	not set	4	0	0	0
chloramphenicol	Muscle	0.0001	not set	2	0	0	0
chlortetracycline	Kidney	0.01	not set	4	0	0	0
ciprofloxacin	Kidney	0.005	not set	3	0	0	0
cloxacillin	Kidney	0.01	not set	4	0	0	0

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
danofloxacin	Kidney	0.005	not set	3	0	0	0
difloxacin	Kidney	0.005	not set	3	0	0	0
dihydrostreptomycin	Kidney	0.1	0.3	4	0	0	0
dimetridazole	Muscle	0.0001	not set	2	0	0	0
doxycycline	Kidney	0.01	not set	4	0	0	0
enrofloxacin	Kidney	0.005	not set	3	0	0	0
erythromycin	Kidney	0.05	0.3	4	0	0	0
florfenicol	Muscle	0.001	not set	2	0	0	0
flumequine	Kidney	0.005	not set	3	0	0	0
gatifloxacin	Kidney	0.005	not set	3	0	0	0
gentamycin	Kidney	0.05	not set	4	0	0	0
levofloxacin	Kidney	0.005	not set	3	0	0	0
lincomycin	Kidney	0.05	0.2	4	0	0	0
lomefloxacin	Kidney	0.005	not set	3	0	0	0
marbofloxacin	Kidney	0.005	not set	3	0	0	0
metronidazole	Muscle	0.0001	not set	2	0	0	0
moxifloxacin	Kidney	0.005	not set	3	0	0	0
nalidixic acid	Kidney	0.005	not set	3	0	0	0
neomycin	Kidney	0.05	not set	4	0	0	0
norfloxacin	Kidney	0.005	not set	3	0	0	0
oleandomycin	Kidney	0.05	0.1	4	0	0	0
orbifloxacin	Kidney	0.005	not set	3	0	0	0
oxolinic acid	Kidney	0.005	not set	3	0	0	0
oxytetracycline	Kidney	0.01	not set	4	0	0	0
ronidazole	Muscle	0.0001	not set	2	0	0	0
sarafloxacin	Kidney	0.005	not set	3	0	0	0
SEM	Retina	0.002	not defined	3	0	-	-
streptomycin	Kidney	0.1	0.3	4	0	0	0
sulfachloropyridazine	Kidney	0.02	not set	4	0	0	0
sulfadiazine	Kidney	0.01	0.1	4	0	0	0
sulfadimethoxine	Kidney	0.02	not set	4	0	0	0
sulfadimidine (sulfamethazine)	Kidney	0.01	0.1	4	0	0	0
sulfadoxine	Kidney	0.02	0.1	4	0	0	0
sulfafurazole	Kidney	0.02	not set	4	0	0	0
sulfamerazine	Kidney	0.02	not set	4	0	0	0
sulfamethoxazole	Kidney	0.02	not set	4	0	0	0
sulfamethoxydiazine (sulfamerazine)	Kidney	0.02	not set	4	0	0	0
sulfamethoxypyridazine	Kidney	0.02	not set	4	0	0	0
sulfapyridine	Kidney	0.02	not set	4	0	0	0

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
sulfaquinoxaline	Kidney	0.02	not set	4	0	0	0
sulfathiazole	Kidney	0.02	not set	4	0	0	0
sulfatroxazole	Kidney	0.02	0.1	4	0	0	0
tetracycline	Kidney	0.01	not set	4	0	0	0
thiamphenicol	Muscle	0.001	not set	2	0	0	0
tilmicosin	Kidney	0.05	not set	4	0	0	0
trimethoprim	Kidney	0.01	0.05	4	0	0	0
tulathromycin	Kidney	0.05	not set	4	0	0	0
tylosin	Kidney	0.1	not set	4	0	0	0
virginiamycin	Kidney	0.005	not set	4	0	0	0

*In some instances, tetracycline may be present as an impurity in a chlortetracycline or oxytetracycline product and is not considered to be a violative residue.

Table 3: CONTAMINANTS

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
aldrin and dieldrin (HHDN+HEOD)	Fat	0.02	0.2	2	0	0	0
arochlor 1254	Fat	0.03	0.2	2	0	0	0
arochlor 1260	Fat	0.03	0.2	2	0	0	0
chlordan	Fat	0.02	0.2	2	0	0	0
DDT	Fat	0.05	5	2	0	0	0
endosulfan	Fat	0.02	not set	2	0	0	0
endrin	Fat	0.01	not set	2	0	0	0
HCB (hexachlorobenzene)	Fat	0.02	1	2	0	0	0
HCH (BHC)	Fat	0.02	0.3	2	0	0	0
heptachlor	Fat	0.02	0.2	2	0	0	0
lindane (gamma-HCH)	Fat	0.01	2	2	0	0	0
mirex	Fat	0.02	not set	2	0	0	0
pentachlorobenzene	Fat	0.02	not set	2	0	0	0

Table 4: FUNGICIDES

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
amisulbrom	Fat	0.01	0.01	2	0	0	0
azoxystrobin	Fat	0.01	0.02	2	0	0	0
benzovindiflupyr	Fat	0.01	0.01	2	0	0	0
bixafen	Fat	0.01	0.2	2	0	0	0
boscalid	Fat	0.01	0.3	2	0	0	0
carbendazim	Fat	0.01	0.2	2	0	0	0

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
cyproconazole	Fat	0.02	0.03	2	0	0	0
cypredinil	Fat	0.01	0.01	1	0	0	0
difenoconazole	Fat	0.01	0.05	2	0	0	0
epoxiconazole	Fat	0.01	0.01	2	0	0	0
fenhexamid	Fat	0.01	0.05	2	0	0	0
fenpyrazamine	Fat	0.01	0.01	2	0	0	0
fludioxonil	Fat	0.01	0.05	2	0	0	0
fluopicolide	Fat	0.01	0.01	2	0	0	0
fluopyram	Fat	0.01	0.1	2	0	0	0
fluquinconazole	Fat	0.01	0.5	2	0	0	0
flutriafol	Fat	0.02	0.05	2	0	0	0
fluxapyroxad	Fat	0.01	0.05	2	0	0	0
imazalil	Fat	0.01	not set	2	0	0	0
isofetamid	Fat	0.01	0.02	2	0	0	0
isopyrazam	Fat	0.01	0.005	2	0	0	0
isotianil	Fat	0.01	0.02	1	0	0	0
mandestrobin	Fat	0.01	0.02	2	0	0	0
mefentrifluconazole	Fat	0.01	0.2	2	0	0	0
procymidone	Fat	0.02	0.2	2	0	0	0
propamocarb	Fat	0.01	0.01	2	0	0	0
propiconazole	Fat	0.02	0.1	2	0	0	0
proquinazid	Fat	0.01	0.01	2	0	0	0
prothioconazole	Fat	0.01	0.02	2	0	0	0
pydiflumetofen	Fat	0.01	0.02	2	0	0	0
pyraclostrobin	Fat	0.01	0.05	2	0	0	0
pyrimethanil	Fat	0.01	0.05	2	0	0	0
pyriofenone	Fat	0.01	0.01	2	0	0	0
quinoxifen	Fat	0.01	0.1	2	0	0	0
quintozene	Fat	0.02	0.2	2	0	0	0
spiroxamine	Fat	0.01	0.05	2	0	0	0
tebuconazole	Fat	0.01	0.1	2	0	0	0
trifloxystrobin	Fat	0.01	0.05	2	0	0	0

Table 5: HERBICIDES

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
amicarbazone	Fat	0.01	0.01	2	0	0	0
cinmethylin	Fat	0.01	0.01	2	0	0	0

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
cloquintocet-mexyl	Fat	0.01	0.1	2	0	0	0
ethofumesate	Fat	0.02	0.5	2	0	0	0
florpyrauxifen-benzyl	Fat	0.01	0.02	2	0	0	0
indaziflam	Fat	0.01	0.03	2	0	0	0
metamitron	Fat	0.01	0.05	2	0	0	0
metazachlor	Fat	0.01	0.05	2	0	0	0
metolachlor	Fat	0.02	0.05	2	0	0	0
propachlor	Fat	0.02	0.02	2	0	0	0
pyrasulfotole	Fat	0.01	0.01	2	0	0	0
pyroxsulam	Fat	0.01	0.01	2	0	0	0
saflufenacil	Fat	0.01	0.01	2	0	0	0
topramezone	Fat	0.01	0.01	2	0	0	0
trifludimoxazin	Fat	0.01	0.01	2	0	0	0

Table 6: HORMONES

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
16-hydroxystanozolol	Urine	0.001	not defined	2	0	-	-
betamethasone	Liver	0.001	not set	2	0	0	0
boldenone 17-alpha	Urine	0.001	not defined	2	0	-	-
boldenone 17-beta	Urine	0.001	not defined	2	0	-	-
dexamethasone	Liver	0.001	0.1	2	0	0	0
dienoestrol	Liver	0.0002	not set	1	0	0	0
diethylstilboestrol	Liver	0.0002	not set	1	0	0	0
flumethasone	Liver	0.001	not set	2	0	0	0
hexoestrol	Liver	0.0002	not set	1	0	0	0
methandriol	Urine	0.005	not defined	2	0	-	-
methylprednisolone	Liver	0.001	not set	2	0	0	0
nortestosterone 17-alpha	Urine	0.001	not defined	2	1	-	-
nortestosterone 17-beta	Urine	0.001	not defined	2	0	-	-
stanozolol	Urine	0.001	not defined	2	0	-	-
trenbolone	Liver	0.0005	not set	1	0	0	0
triamcinolone	Liver	0.001	not set	2	0	0	0
triamcinolone acetonide	Liver	0.001	not set	2	0	0	0
zeranol (alpha-zearalanol)	Liver	0.002	not set	1	0	0	0

Table 7: INSECTICIDES

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
acequinocyl	Fat	0.01	0.02	2	0	0	0
acetamiprid	Fat	0.01	0.01	2	0	0	0
afidopyropen	Fat	0.012	0.1	2	0	0	0
bifenthrin	Fat	0.02	2	2	0	0	0
bioresmethrin	Fat	0.02	not set	2	0	0	0
buprofezin	Fat	0.01	0.05	2	0	0	0
carbaryl	Fat	0.01	0.07	2	0	0	0
chlorantraniliprole	Fat	0.01	0.02	2	0	0	0
chlorfenapyr	Fat	0.02	0.05	2	0	0	0
chlorgenvinphos	Fat	0.005	not set	2	0	0	0
chlorpyrifos	Fat	0.01	0.5	2	0	0	0
chlorpyrifos-methyl	Fat	0.01	0.05	2	0	0	0
clothianidin	Fat	0.01	0.02	2	0	0	0
coumaphos	Fat	0.02	not set	2	0	0	0
cyantraniliprole	Fat	0.01	0.01	2	0	0	0
cyclaniliprole	Fat	0.01	0.05	2	0	0	0
cyfluthrin	Fat	0.02	0.5	2	0	0	0
cyhalothrin	Fat	0.02	0.5	2	0	0	0
cypermethrin	Fat	0.02	0.05	2	0	0	0
deltamethrin	Fat	0.02	not set	2	0	0	0
diafenthuron	Fat	0.01	0.02	2	0	0	0
diazinon	Fat	0.02	0.7	2	0	0	0
dichlorvos	Fat	0.02	0.01	2	0	0	0
dicofol	Fat	0.01	not set	2	0	0	0
dimethoate	Fat	0.02	0.05	2	0	0	0
dinotefuran	Fat	0.03	0.02	2	0	0	0
ethion	Fat	0.02	not set	2	0	0	0
etofenprox	Fat	0.01	0.01	2	0	0	0
famphur	Fat	0.02	not set	2	0	0	0
famphur oxygen-analogue	Fat	0.02	not set	2	0	0	0
fenitrothion	Fat	0.02	0.05	2	0	0	0
fenthion	Fat	0.02	not set	2	0	0	0
fenvvalerate	Fat	0.02	1	2	0	0	0
fipronil	Fat	0.01	0.1	2	0	0	0
flonicamid	Fat	0.01	0.02	2	0	0	0
flubendiamide	Fat	0.01	0.05	2	0	0	0
flumethrin	Fat	0.02	0.1	2	0	0	0
flupyradifurone	Fat	0.01	0.1	2	0	0	0

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
fluralaner	Fat	0.01	not set	2	0	0	0
imidacloprid	Fat	0.01	0.05	2	0	0	0
indoaxacarb	Fat	0.02	3	2	0	0	0
isocycloseram	Fat	0.01	0.01	1	0	0	0
malathion	Fat	0.01	1	2	0	0	0
metaflumizone	Fat	0.01	not set	2	0	0	0
methidathion	Fat	0.02	not set	2	0	0	0
methoxychlor	Fat	0.02	not set	2	0	0	0
methoxyfenozide	Fat	0.01	0.1	1	0	0	0
mevinphos	Fat	0.01	0.05	2	0	0	0
omethoate	Fat	0.02	0.05	2	0	0	0
parathion-methyl	Fat	0.02	not set	2	0	0	0
permethrin	Fat	0.02	1	2	0	0	0
phosmet	Fat	0.02	not set	2	0	0	0
pirimiphos-methyl	Fat	0.02	0.05	2	0	0	0
prothiofos	Fat	0.01	not set	2	0	0	0
pyraclofos	Fat	0.02	not set	2	0	0	0
pyriproxyfen	Fat	0.01	0.02	2	0	0	0
spirotetramat	Fat	0.01	0.02	2	0	0	0
sulfoxaflor	Fat	0.01	0.7	2	0	0	0
tau-fluvalinate	Fat	0.01	not set	2	0	0	0
temephos	Fat	0.02	not set	2	0	0	0

Table 8: METALS

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
antimony	Muscle	0.01	no limit	3	0	0	0
arsenic (total)	Muscle	0.05	no limit	3	1	0	0
cadmium	Muscle	0.01	no limit	3	2	0	0
lead	Muscle	0.01	no limit	3	1	0	0
mercury (total)	Muscle	0.01	no limit	3	1	0	0

Table 9: MYCOTOXINS

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
taleranol (beta-zearalanol)	Liver	0.002	no limit	1	0	0	0
zearalanone	Liver	0.002	no limit	1	0	0	0
zearalenol alpha	Liver	0.002	no limit	1	0	0	0

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
zearalenol beta	Liver	0.002	no limit	1	0	0	0
zearalenone	Liver	0.002	no limit	1	0	0	0

Table 10: OTHER VETERINARY DRUGS

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
cimaterol	Liver	0.0003	not set	2	0	0	0
clenbuterol	Liver	0.0003	not set	2	0	0	0
flunixin	Kidney	0.01	not set	2	0	0	0
ketoprofen	Kidney	0.01	not set	2	0	0	0
mabuterol	Liver	0.0003	not set	2	0	0	0
meloxicam	Kidney	0.005	not set	2	0	0	0
oxyphenbutazone	Kidney	0.005	not set	2	0	0	0
phenylbutazone	Kidney	0.005	not set	2	0	0	0
ractopamine	Liver	0.0003	not set	2	0	0	0
salbutamol	Liver	0.001	not set	2	0	0	0
tolfenamic acid	Kidney	0.005	not set	2	0	0	0
zilpaterol	Liver	0.0003	not set	2	0	0	0

Table 11: SEDATIVES

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	Number of samples tested	>LOR to ≤½MRL	>½MRL to ≤MRL	>MRL
acepromazine	Liver	0.001	not set	2	0	0	0
azaperone	Liver	0.001	not set	2	0	0	0
carazolol	Liver	0.001	not set	2	0	0	0
chlorpromazine	Liver	0.005	not set	2	0	0	0
propionylpromazine	Liver	0.001	not set	2	0	0	0
xylazine	Liver	0.001	not set	2	0	0	0