



GOATS QUESTIONS

INSTRUCTIONS: Follow the 'GO TO' letter or number on the right for each answer. Only answer the questions to which you are directed. When you are directed to a letter, this is the final **recommendation** (shown over the page).

START HERE



1	In which WormBoss zone are these goats? (refer to map)	GO TO
	• High rainfall zone	2
	• Low rainfall cereal zone	5
HIGH RAINFALL ZONE		
2	Are these goats showing signs ¹ suggesting a worm infection?	
	• Yes, these are kids (current year drop) and some are scouring and/or showing weight loss (and deaths may have occurred—see note below)	A
	• Yes, these are weaners or older goats and some are scouring and appear to have lost weight recently (and deaths may have occurred—see note below)	B
	• Yes, these are weaners or older goats and some are scouring, but no weight loss is obvious and no deaths have occurred	C
	• Yes, some of these goats (any age) have anaemia and lethargy, but not scouring, and this is a known barber's pole worm area	D
	• No signs of worms are obvious	3
3	Are these kids or weaners (and at which stage)?	
	• Yes, these are kids just about to be marked	E
	• Yes, these are kids just about to be weaned	F
	• Yes, these are weaned kids (current year drop) in early summer	G
	• Yes, these are weaners (previous year drop) in early summer	G
	• Yes, these are weaners (previous year drop) from the autumn break through to spring	H
	• No, these are adult goats	4

Note: If deaths have occurred, discuss with a veterinarian. Treatment may be recommended before a *WormTest* is conducted, although a test will be needed for confirmation.

¹Signs of worms

Scour worms (black scour worm [*Trichostrongylus* species]; brown stomach worm [*Teladorsagia circumcincta*]; and others [incl. *Nematodirus*): dark scours; weight loss; death.

Barber's pole worm: anaemia (pale inside eyelids and gums); 'bottle jaw' (swelling under the jaw); lethargy, lagging or collapse when mustered; death.

NOTE: Other diseases and poor nutrition can cause similar signs. Consult your veterinarian if *WormTests* do not indicate worms.

²High risk worm conditions

Goats can sometimes be rapidly re-infected with worms, causing illness and death within 2 weeks of a drench. In these situations (i) check at least weekly for visual signs of barber's pole worm; and (ii) conduct a *DrenchCheck*. To reduce this risk, prepare low worm-risk pastures.

4	Which time or event applies to these adult goats?	GO TO
	• These are bucks just prior to joining	I
	• These are adult does, bucks or wethers in late March–April	J
	• These are early kidding does 3–4 weeks before kidding (kidding starts before mid-June)	K
	• These are later kidding does 3–4 weeks before kidding (kidding starts from mid-June)	L
	• These are wethers or bucks from the autumn break, (or when there has been green feed for 6 weeks)	M
	• These are does, wethers or bucks after the pasture has dried off (late spring–early summer)	N

LOW RAINFALL CEREAL ZONE

5	Are these goats showing signs ¹ suggesting a worm infection?	
	• Yes, these are kids (current year drop) and some are scouring and/or showing weight loss (and deaths may have occurred—see note below left)	O
	• Yes, these are weaners or older goats and some are scouring and appear to have lost weight recently (and deaths may have occurred—see note below left)	P
	• Yes, these are weaners or older goats and some are scouring, but no weight loss is obvious and no deaths have occurred	C
	• No signs of worms are obvious	6
6	Are these kids or weaners (and at which stage)?	
	• Yes, these are kids just about to be marked	E
	• Yes, these are kids just about to be weaned	Q
	• Yes, these are weaners (previous year drop) from summer through to spring	R
	• No, these are adult goats	7
7	Which time or event applies to these adult goats?	
	• These are bucks just prior to joining	I
	• These are adult does just prior to kidding	N
	• These are either adult does <u>not</u> just prior to kidding or bucks <u>not</u> just prior to joining or wethers at any time	S

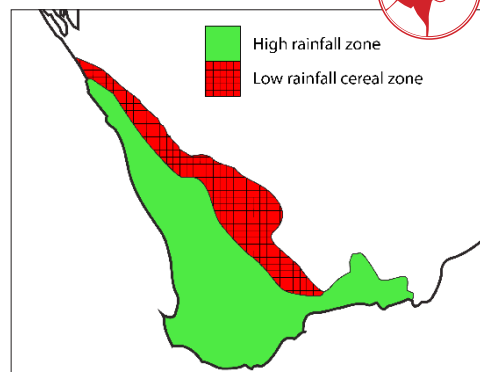
For more information on regional worm control plans, drenches, tests, checks and worms visit www.wormboss.com.au



GOATS

RECOMMENDATIONS

INSTRUCTIONS: Read the **recommendation** that you have been directed to from the *Drench Decision Guide* questions, plus the information in the other three green boxes.



A Treat with an effective drench³ and move to a paddock as 'worm-free' as possible and continue to check closely for signs of worms¹. In 4–6 weeks if the summer drench was due, treat with an effective drench³; if not due, *WormTest* and treat if average worm egg count exceeds 200 epg.

B

- Poorer condition goats (average less than Condition Score 2.5): treat now with an effective drench³ and *WormTest* in 4–6 weeks time.
- Moderate/good condition goats (average Condition Score 2.5 or more): *WormTest* now and drench if average worm egg count exceeds 200 epg, then *WormTest* in a further 4–6 weeks.

C *WormTest* now rather than drench (as 'hypersensitivity' to worm larvae will not respond to drenching). Treat with an effective drench³ if average worm egg count exceeds 200 epg.

D

- If deaths have occurred, discuss with a veterinarian immediately. If this is not possible, both *WormTest* (request a barber's pole worm test) and treat with an effective drench³ immediately, then seek advice.
- If deaths have not occurred, *WormTest* now with a barber's pole worm test. Treat with an effective drench³ if average egg count exceeds 300 epg for weaners and 500 epg for adults, then *WormTest* again in 4–6 weeks².
- If results show barber's pole worm is not the likely cause of anaemia and the problem persists, seek veterinary advice.

E No treatment is required now if kids are developing normally and putting on weight (if not seek veterinary advice). Treat at weaning with an effective drench³.

F Treat at weaning with an effective drench³ and move to a paddock as 'worm-free' as possible and continue to check closely for signs of worms¹. In 4–6 weeks if the summer drench is due, treat with an effective drench³; if not due, *WormTest* and treat if the worm egg count exceeds 200 epg.

G Treat with an effective summer drench³ and move to (or leave on) a dry pasture or crop stubble. If no drench resistance test results are current *WormTest* 10–14 days after the drench to check for complete worm removal.

H *WormTest* at approximately 6-week intervals, starting 6 weeks after the autumn break, until late spring. Treat with an effective drench³ if average egg count exceeds 300 epg (or a different threshold as agreed with your veterinary advisor).

I Treat bucks with an effective drench³ prior to joining, OR *WormTest* and treat if average egg count exceeds 100 epg.

J Treat goats with an effective drench³ between the last week of March and mid-April, OR if in good condition (average Condition Score 2.5 or more), *WormTest*, and then treat with an effective drench³ if average egg count exceeds 200 epg. (Does: review the *Drench Decision Guide* again 3 weeks prior to kidding or if there are signs of worms¹).

K No drench is recommended, as worm burdens will be low after the autumn treatment. Review this *Drench Decision Guide* in late spring or if there are signs of worms¹.

L *WormTest* 3 weeks before kidding starts and treat with an effective drench³ if average worm egg count exceeds 200 epg. Review this *Drench Decision Guide* in late spring or if there are signs of worms¹.

M *WormTest* bucks and wethers after there has been green feed for 6 weeks; treat with an effective drench³ if egg count exceeds 300 epg. Review this *Drench Decision Guide* in late spring or if there are signs of worms¹.

N *WormTest* poorer condition goats now (average Condition Score less than 2.5) and treat with an effective drench³ if the average worm egg count is over 200 epg. Otherwise, continue checking for signs of worms¹ and *WormTest* if concerned.

O Treat with an effective drench³ and move to a paddock as 'worm-free' as possible and continue to monitor visually (if scouring persists 5 days after drenching seek veterinary advice). *WormTest* again in 4–6 weeks.

P

- Poorer condition goats (average less than Condition Score 2.5): treat now with an effective drench³.
- Moderate/good condition goats (average Condition Score 2.5 or more): *WormTest* now and drench if average worm egg count exceeds 200 epg. After, continue checking for signs of worms¹ and *WormTest* if concerned.

Q Treat at weaning with an effective drench³ and move to a paddock as 'worm-free' as possible. Continue checking for signs of worms¹ and *WormTest* if kids are not growing to expectation.

R Continue checking for signs of worms¹ from summer through to next spring and *WormTest* if concerned.

S Continue checking for signs of worms¹ from autumn through spring and *WormTest* if goats are losing condition.
Note: *WormTests* at key times (does: pre-kidding; other goats: winter or spring) will establish an annual pattern and indicate whether routine treatments are necessary.

³Guidelines for worm control treatments

When using anthelmintic products in goats, obtain a veterinary prescription because:

- Goats require a different dose rate and withholding period to that on the label.
- Many drenches are not registered for use in goats (see exceptions below).

Victoria: over the counter drenches can be used if residues are kept below the Maximum Residue Limits (MRL).

South Australia: cattle drenches can be used in goats, but pour-on formulations should be avoided.

When giving all treatments

Follow the product labels or veterinarian's instructions. Dose to the heaviest goat in the group. Calibrate equipment to ensure the right dose is delivered with the right procedures. Do not mix drenches unless the label states they are compatible. Check and comply with withholding periods and export slaughter intervals.

Choosing treatment options on your property

Use these principles together, where possible:

- Use drenches tested to be most effective on your property and either multi-active products or more than one active concurrently (up the race with one and then the other); if drench effectiveness is unknown, conduct a *DrenchCheck* after drenching.
- Use short-acting treatments—reserve long-acting products for specific purposes or high worm-risk times.

For more details read the drench resistance section in the WormBoss Worm Control Program.

Long-acting treatments

These are rarely necessary in Western Australia as pasture planning can provide similar options without the risk that drench resistance may develop more rapidly when long-acting treatments are used. You should seek veterinary advice before using them; more details can be found in the WormBoss Worm Control Program.