



## GOATS

Smallholders who assess and treat individuals: use the Smallholders DDG

## 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



<p><b>1</b> Are these goats showing signs<sup>2</sup> suggesting a worm infection?</p> <ul style="list-style-type: none"> <li>• Yes, they have scouring and/or weight loss</li> <li>• Yes, they have anaemia and lethargy</li> <li>• No signs of worms are obvious</li> </ul>	<p><b>GO TO</b></p> <p><b>A</b></p> <p><b>B</b></p> <p><b>2</b></p>
<p><b>2</b> Are these kids or weaners?</p> <ul style="list-style-type: none"> <li>• These are kids just about to be marked</li> <li>• These are kids just about to be weaned</li> <li>• These are weaners after weaning until the autumn break</li> <li>• These are weaners from the autumn break through to September</li> <li>• These are not kids or weaners</li> </ul>	<p><b>C</b></p> <p><b>D</b></p> <p><b>E</b></p> <p><b>F</b></p> <p><b>3</b></p>

<p><b>3</b> Are these bucks?</p> <ul style="list-style-type: none"> <li>• These are bucks just prior to joining</li> <li>• These are bucks, but it is not just prior to joining</li> <li>• No</li> </ul>	<p><b>GO TO</b></p> <p><b>G</b></p> <p><b>4</b></p> <p><b>4</b></p>
<p><b>4</b> Are these does or wethers (or bucks)?</p> <ul style="list-style-type: none"> <li>• These are spring-kidding does just prior to kidding</li> <li>• It is November/December (regardless of kidding time)</li> <li>• It is January/February</li> <li>• These are autumn-kidding does just prior to kidding</li> <li>• It is March until September</li> </ul>	<p><b>H</b></p> <p><b>I</b></p> <p><b>J</b></p> <p><b>K</b></p> <p><b>L</b></p>

### <sup>1</sup>Guidelines 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:

1. 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.
2. 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.

#### Check effectiveness of long-acting treatments

Use only under veterinary prescription.

*WormTest* with a culture at 35, 60 and 90 days after treatment.

If *WormTest* results are 100 epg or above, drench resistance is likely. Drench immediately with an effective short-acting drench with a different drench group to the long-acting treatment. Seek veterinary advice on the further use of this product. If *WormTest* results are less than 100 epg, then treat with an exit drench at 100 days after the long-acting treatment was given.

Seek veterinary advice if *WormTests* are positive at or before 60 days.

#### Primer and exit drenches

These help to slow drench resistance to persistent treatments.

#### Protection period of persistent treatments

(These are for sheep as goat times are unknown, but likely much shorter as goats metabolise the drenches faster)

Mid-length: 7–28 days. Long-acting: 91–100 days.

NOTE: The protection period against susceptible black scour worm with a long-acting moxidectin injection is 49 days in sheep, but is not set in goats.

#### Use a primer before long-acting treatments

Primer drenches (effective short-acting treatments that do not include the drench group in the long-acting treatment) should be given concurrently with all long-acting treatments.

#### Use an exit drench after all mid-length and long-acting treatments

- Treat with an 'exit drench'—an effective short-acting treatment that does not include the drench group in the mid-length or long-acting treatment. Also called a 'tail-cutter' drench.
- Give this at 42 days (mid-length) or 100 days (long-acting) after the treatment was given.
- *WormTest* 4–6 weeks after the exit drench.

Anytime that you are concerned that the persistent treatment is not providing protection, *WormTest* immediately and seek veterinary advice regarding drench resistance.



## 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** *WormTest* now. Treat with an effective short-acting drench<sup>1</sup> if egg count exceeds 200 epg, then *WormTest* again in 4–6 weeks<sup>3</sup>.

If results show scour worms are not the likely cause of the scouring/weight loss, seek veterinary advice.

**B** *WormTest* now and request a larval culture. Treat with an effective short-acting drench<sup>1</sup> if egg count exceeds 200 epg, then *WormTest* again in 4–6 weeks<sup>3</sup>.

If results show barber's pole worm are not the likely cause of anaemia, seek veterinary advice.

**C** 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 short-acting drench<sup>1</sup>.

**D** Treat at weaning with an effective short-acting drench<sup>1</sup>.

After the drench, *WormTest* spring-drop kids in 5–6 weeks (earlier if a wetter than normal summer), or autumn-drop kids in 4–5 weeks.

**E** *WormTest* spring-drop kids 5–6 weeks after the weaning drench (earlier if a wetter than normal summer), or autumn-drop kids 4–5 weeks<sup>3</sup> after the weaning drench or if this is November/December, give them a highly effective short-acting first summer drench.

Continue testing each 4–6 weeks until the autumn break.

- Treat with an effective short-acting drench<sup>1</sup> if the egg count exceeds 100 epg especially if the paddock weaners are staying on is going to be used for weaners or maiden does in winter.
- Delay the drench if all of the following apply (i) the egg count is less than 200 epg, AND (ii) the paddock will not be used for weaners or maiden does in winter, AND (iii) the weaners are growing and appear well, AND (iv) weaners will go to a 'Smart grazed' paddock within 4 weeks. Drench at the move.

**F** *WormTest* no later than 4–6 weeks after the autumn break. However, in high risk conditions (paddocks highly contaminated with worms/higher rainfall areas/wetter season/poorer condition) test as early as 2 weeks after the break<sup>3</sup>.

Continue testing at 4–6 week intervals through until the end of winter (shorter interval in higher risk conditions). Treat with an effective short-acting drench<sup>1</sup> if egg count exceeds 200 epg, or a different threshold as agreed with your veterinary advisor. Consider a long-acting treatment at the beginning of winter if weaners are going onto unprepared paddocks highly contaminated with worm larvae and conditions are wetter than normal.

**G** Treat bucks with an effective short-acting drench<sup>2</sup> if this coincides with the second summer drench time.

If not, *WormTest* and treat with an effective short-acting drench<sup>1</sup> if egg count exceeds 100 epg.

**H** If does are in poor to moderate condition (less than Condition Score 2.5), treat with an effective short-acting drench<sup>1</sup>.

If does are in moderate to good condition (CS 2.7 or better) *WormTest*. Treat with an effective short-acting drench<sup>1</sup> if egg count exceeds 100 epg.

**I** Treat with a highly effective short-acting drench<sup>1</sup> in November/early December. *WormTest* 6–8 weeks after this first summer drench<sup>3</sup>.

NOTE: The first summer drench time can be staggered across adult dry goat mobs if preparing 'Smart grazed' paddocks with these goats.

**J** *WormTest* 6–8 weeks after the first summer drench or at the end of January<sup>3</sup>. Treat with a highly effective short-acting drench<sup>1</sup> if egg count exceeds 100 epg.

- For autumn-kidding does *WormTest* again just prior to marking.
- For spring-kidding does *WormTest* again in July/August or sooner if does are losing condition.

In barber's pole worm areas or higher than normal summer rainfall conditions, also observe for anaemia and lethargy.

NOTES: The second summer drench time can be staggered across adult dry goat mobs if preparing 'Smart grazed' paddocks with these goats. Graze adult dry goats for only 14 days if barber's pole worm is of concern.

**K** If it has been more than 4–6 weeks since the last *WormTest* or drench, *WormTest* and treat with an effective short-acting drench<sup>1</sup> if the egg count exceeds 100 epg.

**L** If adult dry goats will graze a low worm-risk paddock being prepared for weaners in winter, treat with an effective short-acting drench<sup>1</sup> before they enter the paddock. They should remain there no longer than 21 days. *WormTest* again in July/August or sooner if goats are losing condition<sup>3</sup> and treat with an effective short-acting drench<sup>1</sup> if egg count exceeds 100 epg.

### <sup>2</sup>Signs 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. Consider seeking veterinary advice.

### <sup>3</sup>High 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.

For more information on regional worm control plans, drenches, tests, checks and worms visit [www.wormboss.com.au](http://www.wormboss.com.au)

Future events cannot reliably be predicted accurately. The University of New England ("UNE") and Meat & Livestock Australia Limited ("MLA") make no statement, representations or warranties about the accuracy or completeness of, and you should not rely on any information relating to the WormBoss Drench Decision Guide for Goats ("Information"). UNE and MLA disclaim all responsibility for the Information and all liability (including without limitation liability for negligence) for all expenses, costs, losses and damages you may incur as a result of the Information being inaccurate or incomplete in any way for any reason.

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