

Drench Test Key steps:

1. Contact approved lab for sample kit
2. Select a group of 15 lambs at random and hold in a clean pen
 - a. Place a mark or record tag numbers to identify these lambs
 - b. Allow up to 1 to 2 hours for the lambs to defecate
 - c. Collect 10 separate fresh dung samples and place in containers
3. Dose lambs with chosen product
 - a. Calibrate dosing equipment
 - b. Dose to the heaviest in the group and according to the manufacturer's instructions
 - c. Ensure all lambs are dosed correctly
4. Post sample as soon as possible with relevant details included, preferably on the day of sampling. Should there be some delay prior to posting place samples in refrigerator / cool box (**Do not freeze or leave in direct sunlight**).
5. A post dosing sample is needed to check efficacy and so steps 2 to 4 will need to be repeated:
 - a. Group 2-LV products retest 7 days later
 - b. Group 1-BZ or group 3-ML products retest 14 days later

6. Calculate the percentage reduction as follows:

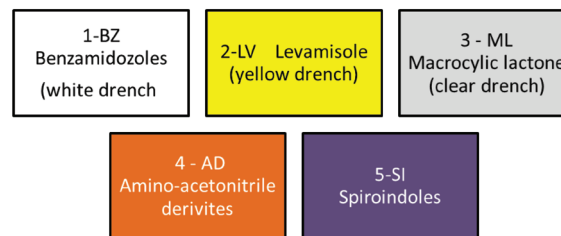
$$\frac{(\text{Egg count Test1} - \text{egg count Test2}) \times 100}{\text{Egg count Test1}}$$

- Greater than 95% reduction = product working effectively
- Less than 95% reduction = product not working effectively

The initial egg count would need to be in excess of 200 epg (i.e. burden present) to draw conclusions regarding product efficacy if count is lower repeat at the next dosing interval.

7. Consult your vet or advisor to assist in interpreting the results and discussing control measures

There are currently 5 groups of anthelmintic available based on their active ingredient



CONTROL OF STOMACH WORMS –

improving sustainability





Control of stomach worms – improving sustainability

Internal parasites, in particular gut worms, are a major challenge to sheep production systems. Parasite control is largely based on suppression of the parasitic burden using anthelmintic products. Nationally anthelmintic resistance i.e. the ability of parasites to survive a dose that should kill them, is increasing for the 3 most common products we use for control; namely, group 1-BZ (white), group 2-LV (yellow) and group 3-ML (clear). For the coming seasons we need to focus on four key actions that will help maintain a susceptible worm population and prolong the efficacy of commonly used anthelmintic products.

1 Don't dose adult ewes for stomach worms unless there is a demonstrated need

- Adult ewes have good immunity to stomach worms and don't need dosing. Lactating yearling ewes and thin/compromised mature ewes may warrant a dose. If mature ewes need routine dosing consult your vet/advisor as there may be an underlying nutrition/health issue
- The overuse of anthelmintics contributes to the development of resistance. Treating ewes with an anthelmintic increases the rate at which resistance develops. Undosed ewes help maintain a susceptible worm population within a farm.
- Avoid using injectable group 3-ML products for external parasite control, use alternative means e.g. plunge dipping

2 Use only products from group 1-BZ (white drenches) to treat *Nematodirus* in lambs

- Group 1-BZ products can effectively treat *Nematodirus* in lambs.
- No resistance to group 1-BZ has been detected for *Nematodirus*.
- Given the low efficacy of group 1-BZ products against other stomach worms, these products are not a suitable choice for later in the season.

3 Quarantine drench - prevent 'buying in' resistance on arrival to the farm

- Quarantine drench purchased sheep using either of the following suggestions given sequentially:
 - Group 4-AD + either Group 2-LV or Group 3-ML
 - Group 5-SI + Group 2-LV

- House sheep after dosing for 48 hours
- Introduce purchased sheep to dirty pasture (i.e. ground grazed frequently by sheep)

4 Drench test/ Faecal egg count

- Find out how effective the products currently being used on farm are by conducting a drench test
- Use faecal egg counting from weaning onward (June to Sept) to determine the need for dosing
- Consult your vet/advisor on the best course of action

Faecal egg count key steps:

- Contact approved lab for sample kit
- Collect at least 10 individual fresh samples at random either by
 - Gathering sheep in the corner of a field for a few minutes and then pick up samples when they move.
 - Selecting a group of 15 lambs at random, hold in a clean pen and collect samples
- Post as soon as possible with relevant details included, preferably on the day of sampling. Should there be some delay prior to posting, place samples in refrigerator / cool box (**Do not freeze or leave in direct sunlight**).
- Strongyle egg counts over 500 eggs per gram of faeces (epg) is an accepted threshold to warrant treatment
- Consult your vet or advisor to aid in interpreting results