The objective of the COWS principles is to slow the development of resistance to parasite treatments, based on the responsible use of these veterinary medicines – which include anthelmintics, flukicides and ectoparasiticides.

Our aim is to ensure these products are used only when necessary, as supported by testing and/or a risk assessment that confirms the need to protect animals from a genuine risk to their health and welfare. This approach avoids the unnecessary use of cattle parasite treatments and reduces exposure of the parasite populations and the environment. Responsible use and disposal of cattle parasite treatments is at the very core of COWS guidance and best practice advice. Here we highlight key practical actions farmers and prescribers can take to promote sustainable parasite control, while safeguarding animal health and welfare and minimising any impacts on the environment.

1. Only treat animals where there is a genuine risk to their health and welfare. Decision making can be aided by appropriate diagnostic tests, clinical signs or forecasting information. Some examples are faecal egg counts (FECs) for gut worms and liver fluke and appropriate blood tests for liver fluke.

2. When treatment is required, choose the most appropriate product and use it correctly, carefully following the instructions on the product label.

3. Checking that wormer and flukicide treatments have worked by using a post-treatment check is best practice and helps avoid use of ineffective products in future.

4. Sustainable parasite control also involves pasture management. Ensure there is an integrated plan that covers all aspects of parasite control. Develop a parasite control plan with the vet, other prescribers and/or animal health advisers based on monitoring and diagnostics, not simply routine treatments based on the calendar year.

5. For some parasites, eg gut worms, it is increasingly possible to target treatments only to those animals that require it. This avoids unnecessary use on a proportion of the herd, reducing the selection pressure for anthelmintic resistance development in the parasite populations and also environmental exposure. Speak with the adviser to see if this is appropriate on the farm.

6. Medicines licensed for farmed livestock since 2005 undergo an Environmental Risk Assessment (ERA), reviewed by the Veterinary Medicines Directorate (VMD), the competent authority in the UK, before any licence is granted. This process results in environmental guidance on the product label, which must be followed. It is also underpinned by the system for monitoring adverse reactions, which includes any environmental impact. For further help and advice, speak with your prescriber or the product manufacturer directly. Manufacturer contact details will be on the bottle or product packaging.

7. Ensure the product is stored correctly and disposed of responsibly:
   a) Check the product label for product-specific details for storage. Most products should be stored securely at 4–25°C, away from extremes of temperatures.
   b) Always check the ‘use by’ date and once open, use within the time shown on the packaging.
c) Follow specific disposal information on the bottle. For example, for most products, the advice is not to allow the product access to watercourses, so do not pour any product down the sink/drain.
d) Dispose of plastic storage containers and equipment as per local guidance.

More details can be found at:
• COWS - Promoting Sustainable Control of Cattle Parasites
• NOAH - responsible use of animal medicines - NOAH (National Office of Animal Health)
• VMD - VMD product information database