

Approach to Treating Canine Acute Diarrhoea (CAD)

A resource to support veterinary team discussions about CAD and explore ways to reduce unnecessary antibiotic use as a practice.

Reminder of the evidence:

Dogs with acute diarrhoea, with or without blood, that are systemically well or that have mild or moderate systemic signs ([Diarrhoea infographic](#)) show minimal to no benefit from antibiotic use. Nearly all will resolve within 5-7 days regardless of whether antibiotics are used.

A recent VetCompass [study](#) found that prescription of antibiotics at first presentation of uncomplicated diarrhoea in dogs had no difference in clinical resolution of these cases. The study included 894 dogs shows that dogs with uncomplicated diarrhoea do not need antibiotics as part of their veterinary care plans. These findings will help veterinary surgeons care for their canine patients while avoiding unnecessary use of antibiotics, and ensure owners know what to expect when seeking veterinary advice.

In fact, antibiotics are more likely to cause negative consequences (intestinal dysbiosis, adverse effects for the individual animal, prolongation of diarrhoea and potentiation of AMR). Every time antibiotics are used, bacteria get a chance to develop resistance. That doesn't mean they shouldn't be used at all – it just means they should only be used where appropriate.

This [infographic](#) shows the five steps of acute canine diarrhoea management. Based on the ENOVAT guidelines, the evidence suggests that in the 90% of CAD cases which are considered mild, antibiotics should not be used. Dogs with diarrhoea that are moderate cases (depressed, dehydrated and may have systemic signs), often require hospitalisation for supportive therapy (IV fluids). Even then, antibiotics should only be used unless the dog is not responding to supportive therapy or is showing signs that would place it in the severe category - such cases are likely very rare (~1% of all dogs with acute diarrhoea).

Every animal should be carefully evaluated to guide decision making. For dogs with mild or moderate disease, antibiotics do not reduce mortality, prevent progression of disease or significantly shorten the disease course ([Efficacy of antimicrobial and nutraceutical treatment for canine acute diarrhoea: A systematic review and meta-analysis for European Network for Optimization of Antimicrobial Therapy \(ENOVAT\) guidelines - PubMed](#)). For a very small minority (~1%) of dogs that present with acute diarrhoea and severe disease (those suspected of developing sepsis), broad spectrum antibiotics are recommended.

The change/s you make will depend on what your current prescribing practices are:

- If you are currently giving antibiotics to the mild category, consider reserving them for those that you are admitting only (moderate cases).
- If you are currently giving them to moderate cases when you admit, consider reserving them for the severe cases where there are the signs of systemic inflammatory response
- If you are currently giving fluoroquinolones or metronidazole to these acute cases, use an alternative and avoid using products containing Highest Priority Critically Important Antibiotics (HP-CIA).
- If the presence of blood is a factor that influences your use of antibiotics, the guidelines state that this does not change the severity category and therefore should not lead to antibiotic use. Some owners may be aware of human medical advice where blood in stools can indicate some serious conditions, reassurance for clients may be necessary.

From where you are now, each step towards only giving antibiotics to those severe cases that really need them and is a step forward in antimicrobial stewardship – you don't need to move to only giving antibiotics to 1% of cases in one go - get there gradually.

How to get started

Team discussions and meeting/s:

- You may need a series of meetings with team members first to agree the best approach and to consider what, if any, policies already exist. If policies do exist, are they fit for purpose?
- If you work as part of a corporate group, further engagement with management and clinical steering groups may be appropriate/required.

Use clinical data from your Practice Management System (PMS) and the team resources in the RUMA CA&E CAD [toolkit](#) to support discussions. Share guideline/research highlights and relevant videos from the toolkit explaining why antibiotics are rarely indicated for use in the treatment of CAD.

Questions to discuss

- What is our current approach to CAD?
- Does the team understand that antibiotics are ineffective for most cases?
- What could we change to reduce antibiotic use?

- How will we implement and monitor changes?
- What are the current barriers to change and how can we support each other to ensure a whole-team approach?

You may also wish to consider the following:

- How can our team take a stepwise approach? What is the first step e.g. stopping use in patients with mild non-haemorrhagic disease.
- How do we know when things are moving in the right direction?
- If problems occur, how can we identify them quickly?
- How might we deal with a case when there is an adverse outcome?

By the end of your discussions the team should:

- Understand why antibiotics are not indicated for most CAD cases.
- Feel confident applying evidence-based guidance.
- Agree on a clear, consistent, practice approach.
- Identify barriers to change.
- Commit to consistent client communication.

Here is an example of a possible team meeting structure – this might need to be spread over a few meetings

Step 1 – Bring the whole team together

Explain the aim: a supportive discussion to agree a consistent, patient-centred approach to reducing the use of antibiotics in the treatment of CAD. This should be a positive discussion and is not about criticism – it is about exploring the opportunity for safe reductions in the use of antibiotics. Emphasise that this is NOT about stopping using antibiotics in all dogs presenting with acute diarrhoea but focusing use on those cases that will be most likely to benefit from antibiotic use.

Agenda:

- Common presentations of CAD.
- Current behaviours around antibiotics.
- Concerns or misconceptions.
- Updated evidence and guidelines (use the toolkit resources to support this discussion).

Step 2 – Watch a short explainer video

Use the animations and guideline videos in the [toolkit](#) to reinforce key messages.

Prompts afterwards:

- What surprised or reassured you?
- What are the clinical implications?

Step 3 – Review the evidence

Key findings to highlight:

- Most cases (84%) are mild and self-limiting.
- Antibiotics shorten illness by hours, not days, offering little clinical benefit.
- Risks: GI upset, dysbiosis, AMR.

Discuss how this reflects your practice experience.

Step 4 – Agree a practice approach

Discuss and define:

- When diagnostic tests are worthwhile e.g. faecal culture is not helpful.
- Clear criteria for systemic illness/SIRS.
- Preferred supportive treatments (diet, fluids, probiotics, hydration).
- When to review or re-check cases.
- When antibiotics *are* appropriate (e.g. systemic illness).

Capture a shared practice position.

Step 5 – Plan client communication

Consistency improves client confidence.

Agree:

- Standard phrases/explanations – refer to some of the client facing resources in the [toolkit](#) which you can use or adapt to suit your practice activity.
- When to use ‘no antibiotic required’ forms – links to these can be found in the toolkit [here](#).
- Which resources from the CAD toolkit are useful? Signpost the team to the [toolkit](#) to take a look.

Step 6 – Select your supportive tools

Select relevant CAD toolkit materials that you want to use as a practice for both team use and client facing materials. The toolkit has plenty of resources to support both team discussions and to engage with clients e.g.

- Non-prescription form.
- Explainer animations.
- Posters for consult/waiting rooms.

Tips for success

- Keep conversations open and non-judgemental and encourage contributions from all staff.
- Review progress regularly and adjust as needed.
- Celebrate improvements and positive experiences.
- Carry out a practice audit to assess progress. There is a link to an audit resource in the toolkit.

What if a case doesn't recover and I feel I have done the wrong thing?

Some cases – be that diarrhoea, heart cases, diabetic cases – will not progress as expected, but if you have followed these established and evidenced guidelines then you haven't done anything wrong, and your actions are totally defensible (if it should ever come to that). It is always worth reflecting on these cases as a team to see what has been learnt and whether you would do things differently next time.

Most diarrhoea cases that do not resolve quickly will progress slowly allowing time to revisit and refine the treatment plan. Rapid deterioration suggests serious underlying disease prompting further diagnostic investigations and supportive treatments.

It may be prudent to have clinical guidelines or an approach to a case that looks like it is progressing towards being a chronic diarrhoea case (not the subject of this focus area).

One case that does not progress in the way expected does not mean that the guidelines are wrong and should not be followed in the future – but it is easy to focus on that one case.

Summary

Reducing unnecessary antibiotics in CAD is achievable and supports animal welfare, client trust, and long-term antimicrobial effectiveness. A short, structured, evidence-based team discussion can align your practice and improve outcomes for dogs with acute diarrhoea.