Introduction

Within the UK, vets, animal owners and other people who work with animals administer many millions of doses of different types of veterinary medicine to animals every year. In a relatively small number of cases, an adverse event (AE) occurs. This may occur during, or sometime after, the use of a medicine.

Veterinary professionals, animal owners (including farmers) or anyone else who has reliable knowledge of the incident can report an AE either to the company marketing the medicine or to the Veterinary Medicines Directorate (VMD).

Veterinary pharmacovigilance is the monitoring of all AE reports for emerging patterns of undesirable effects, following the use of veterinary medicines.

During 2016, VMD’s Pharmacovigilance team received and assessed 6559 adverse event reports. This is an increase of over 15% on the previous year.

Most of these reports describe events that occurred in animals during or after the use of authorised veterinary or human medicines. Many reports involved the use of multiple products, some of which may not have been authorised medicines.

Some reports describe reactions experienced by humans exposed to products used to treat animals. Others involved the detection of the residues of veterinary medicines in a food product intended for human consumption, usually milk, before it enters the food chain.

This Summary provides an overview of the adverse events received in 2016. A detailed review is available on GOV.UK - search for Pharmacovigilance review.
The number of adverse event reports received in 2016 increased compared to 2015.

We received ‘spontaneous’ reports from many sources.

The events reported occurred after normal use of veterinary medicines.

Fewer than 200 people reacted unfavourably after using veterinary medicines.

The number of reports increased by 15% overall.

The magnitude of the change varied from species to species.

The number of spontaneous reports for all major¹ species increased from 2015 to 2016, except for cats.

The largest increases in number of reports were for rabbits and sheep, with an increase of 35% and 40% respectively.

The number of cat reports decreased by less than 1%.

¹ Major species are those for which we receive most reports.
The number of suspected lack of efficacy (medicine not working) reports increased for some major species and decreased for others.

<table>
<thead>
<tr>
<th>Species</th>
<th>% Change from 2015 to 2016</th>
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<tbody>
<tr>
<td>Dogs</td>
<td>-60%</td>
</tr>
<tr>
<td>Cats</td>
<td>-40%</td>
</tr>
<tr>
<td>Horses</td>
<td>-20%</td>
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<tr>
<td>Rabbits</td>
<td>0%</td>
</tr>
<tr>
<td>Cattle</td>
<td>10%</td>
</tr>
<tr>
<td>Sheep</td>
<td>25%</td>
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Both cats and dogs showed a marked decrease in the number of suspected lack of efficacy reports compared to 2015.

The number of safety (adverse reaction) reports increased across all major species.

The number of cat adverse reaction reports received only increased by 2%.

For other major species, the increase ranged from 10% to almost 25%.
Most products involved in animal adverse event reports were authorised veterinary medicines.

Human medicines accounted for almost 2% of products mentioned in these reports.

1 – Extemp = extemporaneous medicines, which are not authorised medicines but specifically prepared for an individual patient in accordance with a veterinary prescription.

Vaccinations and immunotherapy products were the authorised veterinary medicines most often associated with animal adverse event reports.

Anti-parasitic products for the treatment of internal and/or external parasites accounted for almost a fifth of all authorised veterinary medicines referred to in adverse event reports.
The number of reports of suspected lack of efficacy was smaller than the number of reports of adverse reaction for all major species, except sheep.

![Graph showing number of reports of suspected lack of efficacy and adverse reactions for different species.](image)

Fewer than 5 animals per 10,000 in the UK population of the major species were affected by adverse reactions or medicines not working.

![Graph showing number of animals affected per 10,000 in the species UK population.](image)
Important messages

For anyone using veterinary medicines

- Always obtain veterinary medicines from a reputable source.
- If you have a problem with an authorised veterinary medicine, report it to the Marketing Authorisation Holder or to us\(^2\). We cannot take regulatory action to change the way a medicine is used without sufficient evidence of there being a problem. Conversations on social media do not provide the evidence we need.
- Always use appropriate safety equipment when administering medicines that may be harmful to your own health to an animal.
- Always keep animal medicines out-of-sight and reach of children (and animals), and in a separate place to where any personal medicines are kept, to reduce the chance of accidental ingestion.
- Never allow animals recently treated with topical medicines e.g. spot-ons, collars, to sleep in the same room as people.
- Always ensure that spot-on anti-parasitic products are completely dry before allowing anyone, including other pets, to kiss, cuddle or groom the treated animal.
- Do not allow your dog to run free in areas inhabited by farm animals or horses. They may excrete residues of their medicines that could be harmful to your dog, if ingested.
- Always dispose of empty medicine containers promptly, in accordance with labelling instructions. Horse medicines administered orally by syringe are not only attractive to dogs, but also could have fatal results if discarded ‘empties’ are eaten by a dog.

For animal handlers

- Always seek immediate medical attention if you injure yourself whilst injecting animals with an oil-based vaccine. Report the incident to us, including as much information as you can.
- If you work in a veterinary surgery, be aware of the hazards posed by some medicines, e.g. inhaled anaesthetics to unborn children.
- If you are planning to euthanise a horse, have a secondary plan available in case the original method does not achieve the required outcome.