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Veterinarians of Europe

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Antimicrobial drug prescribing habits of veterinarians in Europe

ESVAC meeting
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London

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Deputy Executive Director



FVE/HMA Survey provides unique insight in prescription behaviour

- Factors and information sources used to decide on prescribing behaviour
- Factors influencing the use of sensitivity testing
- Main indications to prescribe antimicrobials
- Insight into 'Critical Important Antimicrobial' use



**Thanks to all co-authors, vets replying,
experts who gave input!**



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HMA-FVE Survey on factors influencing veterinarians' prescription habits.

- ✓ 20 Questions/ 5 European languages
- ✓ 3004 Veterinary practitioners/25 European countries

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Survey response exceeds expectation



The outcome are two reports:

- Prescribing behaviour of veterinarians
- Frequency/reasons to perform sensitivity testing
- Main indications to prescribe AB to food producing animals
- Main indications to prescribe AB to companion animals

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Paper

Factors influencing antibiotic prescribing habits and use of sensitivity testing amongst veterinarians in Europe

OPEN ACCESS

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Abstract

The Heads of Medicines Agencies and the Federation of Veterinarians of Europe undertook a survey to gain a better insight into the decision-making process of veterinarians in Europe when deciding which antibiotics to prescribe. The survey was completed by 3004 practitioners from 25 European countries. Analysis was to the level of different types of practitioner (food producing (FP) animals, companion animals, equines) and country for Belgium, Czech Republic, France, Germany, Spain, Sweden and the UK. Responses indicate no single information source is universally considered critical, though training, published literature and experience were the most important. Factors recorded which most strongly influenced prescribing behaviour were sensitivity tests, own experience, the risk for antibiotic resistance developing and ease of administration. Most practitioners usually take into account responsible use warnings. Antibiotic sensitivity testing is usually performed where a treatment failure has occurred. Significant differences were observed in the frequency of sensitivity testing at the level of types of practitioners and country. The responses indicate a need to improve sensitivity tests and services, with the availability of rapid and cheaper testing.

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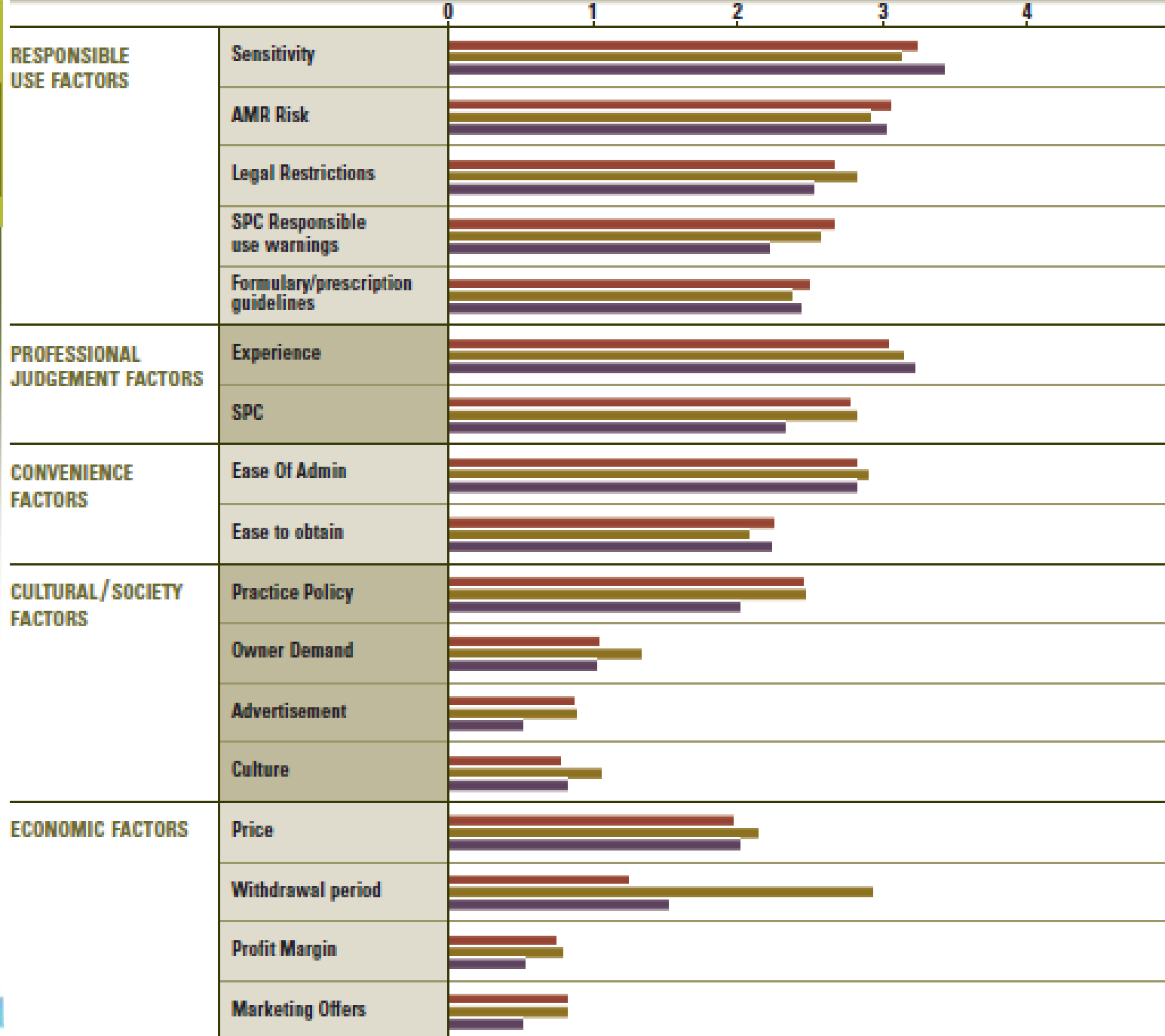
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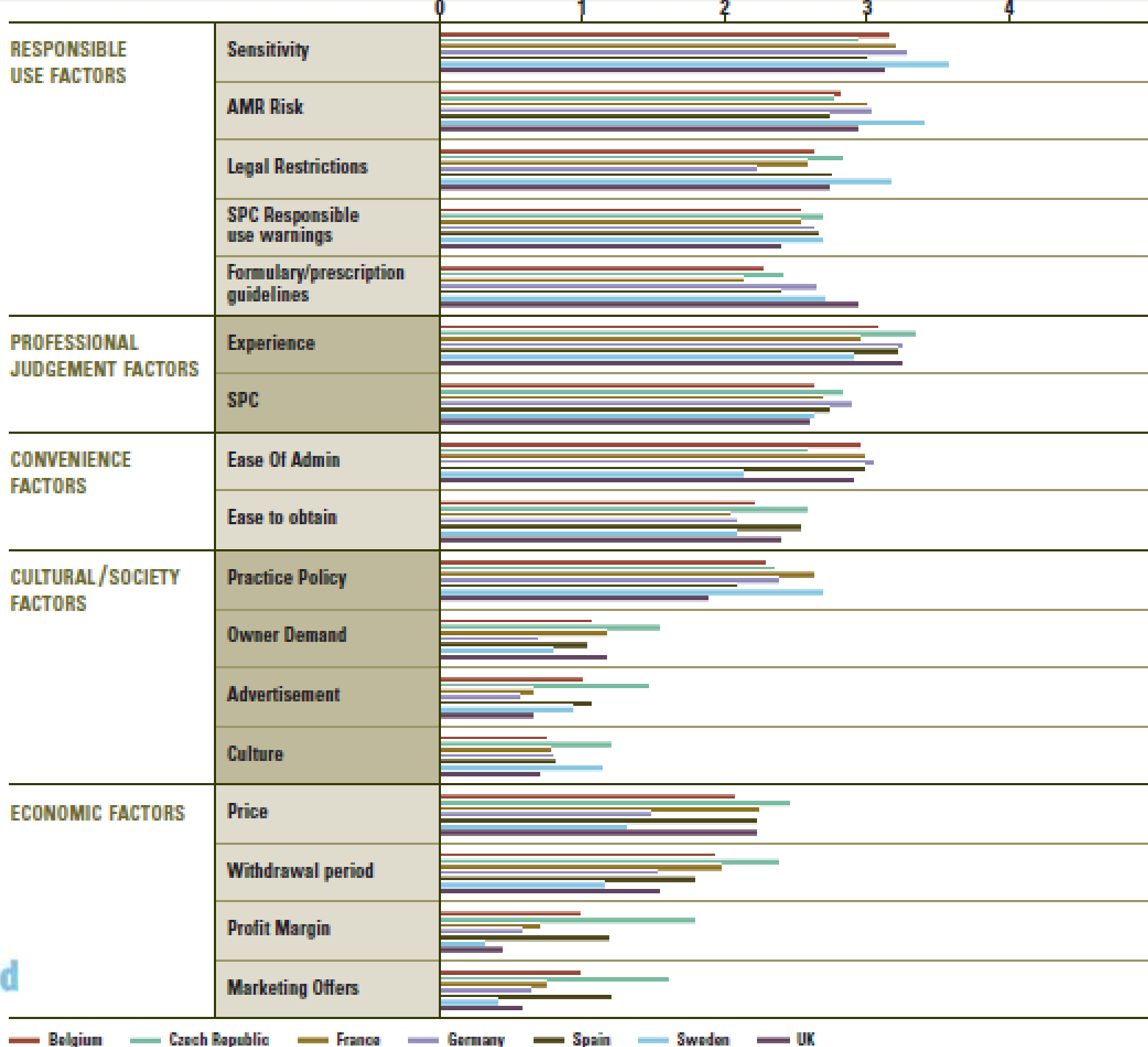
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Question

*“Which factors
are the most important for you to
prescribe?”*





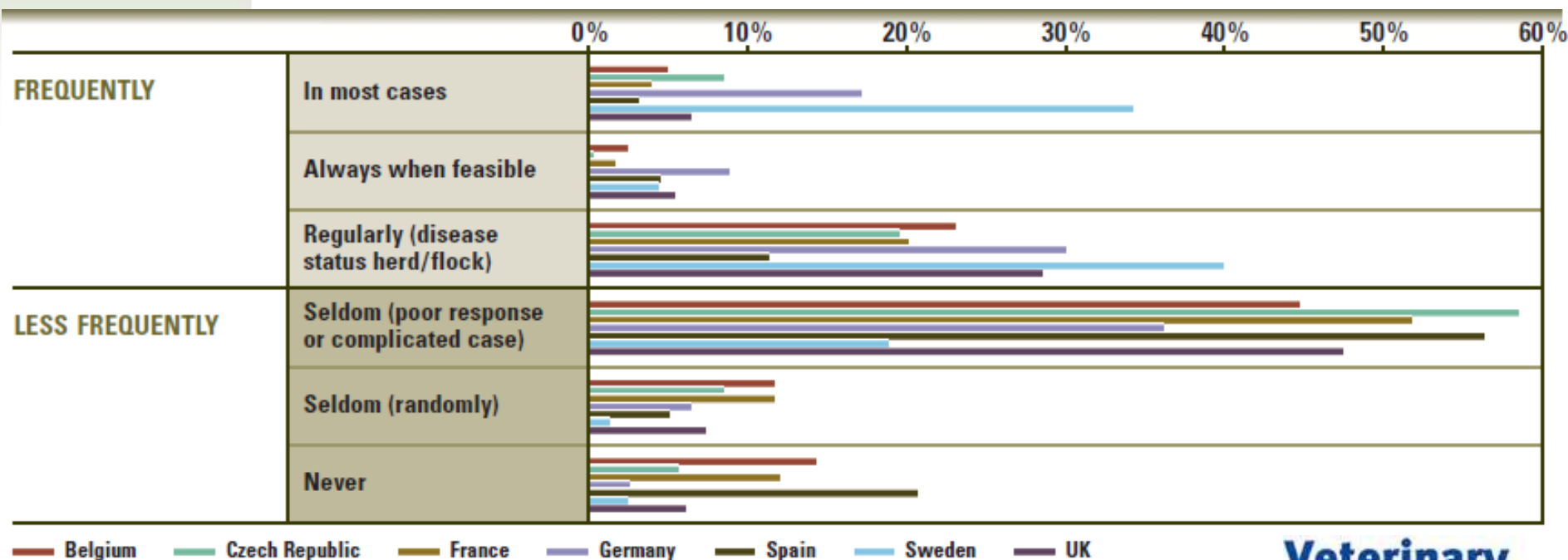


Question

*“How often do you perform
sensitivity testing”*



*Increase sensitivity testing?
Make them **faster, cheaper** and more
available*





Question

“If you do not follow responsible use warnings, why not?”



Owner and economic pressure override responsible use warnings

- because the owner wants/requests broadspectrum with short withdrawal period
- Ease of administration esp cats, horses, bulls
- Critical ill animals
- MUMS – little choice
- For welfare reasons
- Sensitivity testing too expensive
- ...



Report two:

“Which are the main indications per companion animals and livestock for which you prescribe antimicrobials?”

Showing us:

- Main indications to prescribe antibiotics for
- Which antibiotics are used for which indications



- Gives **top 5 cited indications for 5 species** to prescribe antibiotics

Eg. cattle: mastitis, respiratory diseases, diarrhea, uterine and locomotion are the most cited indications

- Gives **most cited antibiotics per indication**
eg for mastitis; penicillines are mostly used, followed by cephalosporins





Some outcomes

- Use of 'older' antibiotics predominates
- Shows the most important indications to use CIA's
- Clear 'preferences' between countries can be observed
- Looks into the use of formularies and guidance to drive responsible use



Report II nicely supplements ESVAC reports

- ESVAC gives sales data but not for which species and indication used
- This report highlight most important indications for antibiotic use
- And shows when CIAs are mostly used
- The report shows which are the main indications for which you need to prevent or find alternative treatments for - if you would wish to reduce antibiotic use



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Two new responsible use leaflets available: FVE & European Farmers + European vets, doctors & dentists



Federation of Veterinarians of Europe



copa*cogeca
European Farmers' Organisation
European Agricultural Organisations



Veterinarians and farmers care for animals and people

"Responsible use of antibiotics in food-producing animals – How can this be ensured?"

Antibiotic resistance in animals – much like in their human counterparts – is becoming a greater challenge every day. Antibiotic resistance occurs when certain bacteria are able to "resist" and survive after they have been exposed to a specific antibiotic that would normally be expected to kill them or inhibit their growth.

- ▶ **Antibiotics are not always the answer**
Antibiotics are used in animals for the same reason as for people: they are vital to treat and control diseases. Protecting the health of animals helps to protect human health. But the risk that the organism causing the disease will develop resistance to them increases every time they are used. To make sure that the limited antibiotics available on the market stay effective now and in the future, they must be used with caution and only on veterinary prescription. Not every infectious disease requires antibiotic treatment (e.g. viral infections).
- ▶ **Do not medicate your animal yourself**
Do not use antibiotics for diseases other than those they are prescribed for or after they have passed their use-by-date. They can be inappropriate for the current condition, out of date, contraindicated or contaminated. Only veterinarians can prescribe antibiotics for animals, following an examination and clinical diagnosis. Never source antibiotics outside the legal channels.
- ▶ **Follow the dosage and instructions**
Make sure that your animals get all the recommended doses of an antibiotic as prescribed by your veterinarian, even if they get better. Not only will this help to clear up the current infection, but it will also help to keep the bacteria from discovering a new way of becoming resistant to the antibiotic. Always respect the withdrawal time in order to ensure that no residues remain before the meat or milk enters the food chain.
- ▶ **Prevention is better than cure**
One of the best things to do to prevent use of antibiotics is to ensure that animals are kept healthy, by guaranteeing good hygiene, proper housing and ventilation, feed with a high nutritional value, and, where available, use of vaccines as part of a good prevention and control strategy. Mixing animals with different health statuses should be avoided.



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Health professionals care for animals and people

Doctors, Dentists and Veterinarians advise

"How to use antibiotics responsibly"

Antibiotics are vital to treating and preventing the spread of disease in animals and humans. However the risk that the bacteria causing a disease will develop a resistance to an antibiotic increases every time it is used. Once bacteria are resistant, the antibiotic is ineffective and can no longer treat the disease. Help us save lives and make sure that antibiotics stay effective now and in the future by following these tips:

- ▶ **"Antibiotics are not always the answer"**
Not every infectious disease can be treated with antibiotics (e.g. viral infections, colds and flu). Sometimes you can recover easily without using them (e.g. superficial cat bite wounds). To protect your own health and that of others, don't demand antibiotics when your doctor, dentist or veterinarian assures you that they are not needed.
- ▶ **"Keep yourself, your family and your animal**

• Antibiotic resistance is the condition when antibiotics no longer work against the (bacterial) infection that they previously worked well against.