**10 Myth busting facts about antibiotics and animals**

Myth 1 – In the EU, farm animals consume more antibiotics than humans.

Fact - Use of antibiotics is lower in farm animals than in humans, as shown in the latest 2021 JIACRA report published by the European Centre for Disease Prevention and Control (ECDC), the European Food Safety Authority (EFSA), and the European Medicines Agency (EMA). Massive efforts have been made by the animal sector over the last decade which has seen a reduction of sales of veterinary antibiotics of over 34% (2020 ESVAC report).

**Myth 2 – In the EU, antibiotics are used to promote the growth of farm animals**

Fact – The use of all growth promoters – including antibiotics - in farm animals is banned in the EU since 2006. Unfortunately, these are still used in many non-EU countries to increase growth rates in animals.

**Myth 5 – There is a high risk that people become ill as a result of antibiotic resistance developed in animals and transferred to humans.**

Fact - People may believe that antibiotic resistance in people is transferred by animals to humans, but in reality a complex and rare sequence of events would have to occur for this to be the case, making the transfer of resistance from animals to humans a very occasional occurrence. Additionally, transfer of resistance may happen towards both directions, i.e. from animals to humans and vice versa.

**Myth 4 – Antimicrobial resistance in humans is the result of overuse of antibiotics in animals.**

Fact – the mechanisms of development of antibiotic resistance in humans and in animals is the same. Misuse or overuse of antibiotics in humans and in animals may lead to the development of resistance, while transfer of antibiotic resistance through species might happen occasionally and towards both directions (see also previous question). Therefore, banning certain antibiotics for use in animals will have little effect on the human antimicrobial resistance burden. This is acknowledged by many [scientific bodies](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2818%2930605-4/fulltext) and authorities, which have stated that about 75% of the total burden of infections with antibiotic-resistant bacteria in EU and EEA countries are associated with human patients and healthcare settings. Other main drivers include the misuse and overuse of antimicrobials; the lack of access to clean water, sanitation and hygiene (WASH) for both humans and animals, poor access to quality, affordable medicines, vaccines and diagnostics; the lack of awareness and knowledge; and lack of enforcement of legislation ([WH0](https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance)).   Banning certain antibiotics for use in animals may have a contra-effect. Dependance on few only antibiotics for the treatment of infections in animals will increase the pressure to bacteria and the selection for antibiotic resistance, thus leading to the opposite effect.

**Myth 5 - Antibiotics are present in food.**

Fact - In the EU, very strict “waiting” or withdrawal periods are [set](https://www.ema.europa.eu/en/veterinary-regulatory/research-development/maximum-residue-limits-mrl) for each antibiotic for veterinary use, giving time for medicines to be eliminated from the animal prior to slaughter. This ensures food safety as food products of animal origin cannot contain residues of antibiotics above very stringent limits.

**Myth 6- Intensive farming favors the development of antimicrobial resistance.**

Fact – The main factor for resistance development is the level of use / misuse of antibiotics, which is not necessarily linked to farm scale or system. Resistant bacteria are found on intensive and organic farms alike, since animals become sick at some time in all production systems, and so are treated with veterinary antibiotics whenever this is deemed necessary by a veterinarian ([Commission Regulation (EC) No 889/2008](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008R0889&from=EN) and [Council Regulation (EC) No 834/2007](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32007R0834&from=EN)).

**Myth 7 - Antibiotics are excessively used in animals by non-competent persons.**

Fact - Regulation 2019/6 indicates that antibiotics in animals are used only following the examination, diagnosis and prescription by a veterinarian. Veterinarians are highly educated to evaluate the health condition of animals under their care, to diagnose and to prescribe the necessary treatment in the same way that doctors do for people. They are additionally well-aware of the mechanisms leading to the development of antibiotic resistance and the risks for animals and people in the same way that doctors are for people. Enforcing veterinary supervision and care through the implementation of regular veterinary visits as foreseen by the [Regulation (EU) 2016/429](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02016R0429-20191214) can have a major impact on promotion and implementation of best practices, which leads to better health of animals and minimize the need to use antibiotics.

**Myth 8 - Preventive treatment is used on EU farms to compensate for poor hygiene and husbandry**

Fact – Animals – like humans – can become sick even when kept under the best conditions. Animals are recognized as sentient beings (article 13 of the [TFEU](file:///C%3A%5CUsers%5CDespoina%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5CM1JEHRZE%5Cthe%20%27Treaty%20on%20the%20Functioning%20of%20the%20European%20Union%27%20%28TFEU%29%20and%20introduced%20the%20recognition%20that%20animals%20are%20sentient%20beings.%20Article%2013%20of%20Title%20II%20states%20that%3A)) and have to be treated when animals get sick. The veterinarian is one to evaluate the situation, diagnose and prescribe the right treatment to those sick animals, including antibiotics where needed, as doctors do for people. Applying prevention measures is also crucial in ensuring overall animal health of animals. Regulation 2019/6 bans the preventive (prophylactic) use of antibiotics in groups of animals. Preventive treatment with antibiotics in animals is only permitted for individual animals and in exceptional cases for a small number of animals, when the risk of an infection is very high and the consequences are likely to be severe.

The use of antibiotics in animals is only allowed on veterinary prescription and the use of veterinary medicines “to compensate for poor hygiene, inadequate animal husbandry or lack of care or to compensate for poor farm management” is expressly banned as per Regulation 2019/6.

**Myth 9- Treatment of animals as a group is not necessary in modern farming practices in the EU**

Fact - Treatment of groups of animals through their drinking water / feed can be the safest and most effective treatment method. Regulation 2019/4 on medicated feed introduces strict rules for the use of oral medication, via feed or water. Getting control of individual animals and injecting them can be very stressful to the animal, especially if a course of treatment involving daily dosage is needed. Hence this makes individual treatment impractical in EU modern farming. It should be up to the veterinarian to decide the optimum way to administer medication, which remains under veterinary control and prescription.

**Myth 10 – We have to set a target for zero use of antibiotics in animals.**

Fact – The target should be the reduction of antibiotic resistance and not the zero use of antibiotics in animals or in people. Antibiotics must be available when needed and be used prudently and responsible in both animals and humans, following a diagnosis and a prescription by a veterinarian (in animals) or a doctor (in humans), who need these tools to control infections and stop the spread of disease.