

**Senate Bill 785
Senate Committee on Health Care**

Position: Opposed

March 16, 2017

Dear Chair Monnes Anderson, Vice Chair Kruse and Committee Members:

Antimicrobial resistance is a critically important One Health issue. As medical professionals, veterinarians, as are our counterparts in human medicine, are concerned about such resistance and the possible threats to human, animal, and environmental health. However, regardless of how well-intentioned Senate Bill 785 may be, we do not support the legislation for many reasons.

First, science tells us that antibiotic use in food animals is only one of many pressures that could cause resistance to emerge and spread. It is important to understand that the issue of resistant bacteria is highly complex and not a simple concern that SB 785 seems to imply.

- Some resistance occurs without human action, as bacteria can produce and use antibiotics against other bacteria, leading to a low-level of natural selection for resistance to antibiotics. However, the current higher levels of antibiotic resistant bacteria are attributed to overuse and abuse of antibiotics.
- In both human and veterinary medicine, antibiotics must be used responsibly because use can bring about the development, the persistence, and the spread of resistant bacteria. However, it is generally accepted that actions related to human use of antibiotics have by far the most important impacts on human health.
- This doesn't mean that we don't closely monitor the use of antibiotics in food production. And, in fact, this is exactly what is occurring today to address concerns about resistant bacteria and to minimize overall risk.

Under the umbrella of the One Health Concept, there has been ongoing collaboration among the Food and Drug Administration, the United States Department of Agriculture,

the Center for Veterinary Medicine, and the Center for Disease Control to address these concerns. These agencies have trained experts in the field, as well as budgetary support, to accomplish this. One result of this collaboration has been the change to the Veterinary Feed Directive.

Second, the proposed legislation does not acknowledge significant national actions already taken to protect public health - actions such as changes to the VFD that are being implemented by food animal veterinarians here in Oregon and across the country.

- Proponents of this legislation continue to imply that antibiotics in food production are routinely administered for the purpose of growth promotion. This is patently incorrect, and, in fact, prohibited by law under the VFD.

Until this change, feed additive antibiotics were purchased over the counter. Now they are under the oversight of a licensed veterinarian and can only be used in food production by direct prescriptive order of the veterinarian. However, injectable antibiotics can be purchased over the counter and more often than not are misused with regard to which antibiotic, dose, and duration of treatment. Repeatedly, my colleagues and I struggle attempting to treat diseases that owners have mistreated and are resistant to quality medical practices.

Where do we find the greatest concern? With hobby and some small producers -often with their misuse of penicillin, which is the arch typical beta lactam that is the model for approximately 90% of the bacterial resistance the human profession is concerned about.

- Supporters of SB 785 also continue to contend that antibiotics in food production are used to compensate for unsanitary or overcrowded conditions. This, too, is false. As in human medicine, prophylactic antibiotics are most often used during immunosuppression due to stress, such as surgery in humans or severe weather conditions in veterinary medicine.

Third, SB 785 bill states that 70% of all antibiotics sold in the United States are given to food-producing animals, with no explanation of these numbers.

- This statement ignores current FDA oversight of the VFD and is woefully inaccurate, misleading, and reflects a lack of understanding of modern food animal production practices.
- I would like to provide some additional context to this statement in the bill. There is a classification of antibiotics that helps to support a healthy mix of bacteria and protozoa in the gastrointestinal tract of ruminants and poultry. This class of drugs is called

ionophores – and they account for approximately 40% of the 70% of antibiotics targeted for use in food animals. According to the FDA, ionophores *do not* contribute to increasing resistance to antibiotics that are medically important to humans or animals.

Fourth, the proposed legislation attempts to usurp the professional judgment of practicing veterinarians by prohibiting our use of antibiotics for disease prevention.

- As noted in the proposed legislation, veterinarians may only use medically important antibiotics to:
 - Control the spread of disease or infection;
 - Treat a disease or infection; or
 - In relation to surgical or other medical procedures.

The judicious use of antibiotics by veterinarians for disease prevention is, at times, critical for the health and welfare of our patients. Not using antibiotics to prevent disease in high-risk situations would be considered inhumane. Yet, we continue to hear from proponents of SB 785 this is a loophole that veterinarians and producers would use to indiscriminately administer medically important drugs whenever and for whatever purpose.

Their contention is disrespectful to me and my colleagues in food production medicine. On a personal level, it is insulting not only to my veterinary education and training, but also to my 35 years of experience in clinical practice and professional judgment.

- The difference between prevention and treatment is usually 24 hours. Veterinarians know when a particular disease is likely and we prevent it rather than waiting to be behind the 8 ball. This minimizes losses due to disease. Antibiotics used in this manner are rarely used in human medicine, if at all.

For these reasons the OVMA is against SB 785 and asks that each of you also oppose the legislation. Thank you for your time and consideration.

Sincerely,

Chuck

Chuck Meyer, DVM
Past President

Opposed to Senate Bill 785 (Backgrounder)

Antimicrobial resistance is an important One Health issue. As medical professionals, veterinarians – as well as their counterparts in human medicine – are concerned about such resistance and the possible threats to human, animal, and environmental health.

In both human and veterinary medicine, antibiotics must be used responsibly because use can bring about the development, the persistence, and the spread of resistant bacteria. However, it is generally accepted that the most significant impact on human health is attributed to human use of antibiotics.

Federal action on antibiotic resistant concerns

Senate Bill 785 states that antibiotics sold for food-producing animals for the purpose of growth promotion. This is incorrect, and, in fact, prohibited. Here are but a few ways in which the federal government has been addressing the antibiotic resistance issue:

- Important changes to the **Veterinary Feed Directive** became effective Jan. 1, 2017 and do not allow for medically important antibiotics to be administered in medicated feeds for weight gain, feed efficiency and growth promotion in food-producing animals. Period. Prior to this change taking effect and being implemented by veterinarians in Oregon and across the country, all principal feed manufacturers worked to end – or stopped – this practice as early as 2016.
- In addition to changes in the VFD, the **National Antimicrobial Resistance Monitoring System for Enteric Bacteria (NARMS)** has continued with its collaboration among local and state extension agencies plus agriculture and public health departments, the Centers for Disease Control, the Food and Drug Administration, and the United States Department of Agriculture to preserve the effectiveness of medically important antimicrobial drugs that are used in food-producing animals.
- **NARMS monitors** trends in antimicrobial resistance among food-borne bacteria for humans, animals, and retail meats. With its research component, it assists the FDA in making decisions related to the approval of safe and effective antimicrobial drugs for animals. In fact, the FDA has used data from NARMS to change how antimicrobials are used in agriculture. For example, the use of fluoroquinolones and cephalosporin drugs were withdrawn for use in food-producing animals as a result of this collaboration.

- Information collected by NARMS also helped to initiate changes in the VFD.
- In order to issue health certificates, veterinarians must become recertified every three years with **USDA APHIS**. Two of the **recertification** modules focus on antibiotic resistance: one on general use in clinical practice and the other with a focus on the VFD.

Oregon educational efforts on antibiotic resistance

The Oregon Veterinary Medical Association (OVMA) and other groups in the state continue to discuss appropriate use of medically important antibiotics. Following are a few examples of what has been occurring for several years:

- The **2016 Oregon Veterinary Conference** featured a daylong track on judicious use of antimicrobials in food-producing animals. Our featured presenter: Dr. Michael Apley, a board-certified veterinary pharmacologist, who served on President Obama's Advisory Council on Combatting Antibiotic-Resistant Bacteria.
- The **OVMA** developed a brochure on **Judicious Use of Antimicrobials** for general practice as well as food production clinics and distributed this to practitioners across the state.
- For each continuing education cycle, the **Oregon Veterinary Medical Examining Board** requires that licensed veterinarians obtain one hour of education on judicious use of antibiotics.
- Pharmaceutical companies such as **Zoetis** and others continue to present **educational webinars** and **workshops** on judicious use of antimicrobials for veterinarians and producers.
- Veterinarians in **production-medicine practices** are meeting with their clients to discuss the VFD and appropriate use of antibiotics.
- **Extension Services** at Oregon State University, as well as the **Oregon Farm Bureau**, the **Oregon Cattlemen's Association** and the **Oregon Dairy Association** continue to provide information on antibiotic resistance and judicious use to livestock producers.