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Chair

Mrs. Joy Smith

Standing Committee on Health

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● (1530)

[*English*]

The Acting Chair (Mr. Tim Uppal (Edmonton—Sherwood Park, CPC)): Welcome, ladies and gentlemen, to the Standing Committee on Health, meeting number 54.

Pursuant to Standing Order 108(2), we are studying antibiotics and livestock.

We have witnesses here today. The witnesses from the Canadian Animal Health Institute are Jean Szkotnicki, president, and Dr. John Prescott. From the Canadian Cattlemen's Association we have John Masswohl, director, and Dr. Reynold Bergen. From the Canadian Pork Council we have Dawn Lawrence, national coordinator. From the Chicken Farmers of Canada we have Mike Dungate and Dr. Leigh Rosengren. From Environmental Defence we have Rick Smith, executive director. And from Pew Charitable Trusts we have Dr. Gail Hansen.

We will allow each organization about a five-minute opening session before the questions.

We will begin with the Canadian Animal Health Institute.

Ms. Jean Szkotnicki (President, Canadian Animal Health Institute): Chair, committee members, and guests, I am pleased to be here today representing the companies that manufacture and distribute animal medications.

Animal medications are intended to keep animals healthy, and they have a secondary role in limiting human exposure to zoonotic diseases, diseases that can be transferred from animals to humans. Many of the companies I represent have a human side to their business, so it goes without question that while our members want the medications they develop to remain effective for a long time, they also do not want to develop antimicrobials that would compromise or jeopardize the effectiveness of the animal medications that they develop for the human side of the industry.

Joining me here today is Dr. John Prescott, a professor of pathobiology at the Ontario Veterinary College in Guelph, Ontario. He joins me since he's an expert in the area of bacteriology and will address any technical questions arising from the committee members. He certainly has had a long-term interest in this area, and he has been a part of many of the discussions that have occurred here in Canada and internationally for many years.

Topics that I will be discussing include the role of the veterinary drugs directorate, a division of Health Canada, in doing pre-market assessment of our products; and post-marketing controls by veterinarians in the veterinary drugs directorate of the Canadian Public Health Agency as well as by the Canadian Food Inspection Agency. I will also talk about the size of the animal health industry and about agriculture's contribution to resistance.

One control I won't be talking about is producer quality assurance programs, the farm-to-fork programs, because I know my colleagues around the table will be discussing those.

VDD, within Health Canada, has pre-marketing controls over the antimicrobials sold in Canada for use in companion and production animals. The VDD review process involves examination of every aspect of a drug from human and animal safety to trials demonstrating a drug's quality and efficacy.

In my formal brief you can see a diagram that briefly outlines the review process. I want to draw your attention to the fact that it's thorough and stringent, and the important part of the review is the human safety component, which ensures that no harmful residues of drugs enter the food chain. There is also an assessment of the potential impact of resistant bacteria being ingested by humans from animal products because of the use of antimicrobials in food-animal production. There is a difference between residues and residue avoidance in antimicrobial resistance.

VDD approves drugs for four uses: the treatment of animals infected with disease, the prevention of disease within herds and flocks, the control of diseases in the case of outbreaks within a herd or flock, and, lastly, the enhancement of growth and feed efficiency.

Many think that in-feed use is equivalent to growth promotion. That is really not the case. It confuses a drug's use with its route of administration. All four uses, including therapeutic use, can be administered via feed or water, and this in many cases is the only practical way to administer medication to large herds and flocks.

The VDD regulates every aspect of labelling, including the species it is intended for, the use, the dosage, and the warnings and cautions. Extra label provisions do exist for the use of antimicrobials whereby the veterinarian directs the use of a medication under the situation of having a valid veterinary client-patient relationship.

Post-marketing controls also exist beyond the VDD. Veterinarian-directed use of antimicrobials is a fact of life, and most new antimicrobials are prescription. Due to concerns about antimicrobial resistance, I would point out that the Canadian Veterinary Medical Association has developed prudent-use guidelines for the use of antimicrobials in food-animal medicine. It is very much a concern of the veterinary profession. The monitoring for adverse events is an ongoing effort of the veterinary drugs directorate within Health Canada.

● (1535)

The public health agency looks toward evaluating trends on the use of medication and for resistance trends in food, animals, and humans. Last, CFIA tests to ensure no harmful residues enter the food chain.

I just wanted to point out that we have limited growth in the animal health industry. There was a 1.1% increase in the total kilograms of active antimicrobials distributed from 2008 to 2009 by our members. Total sales of medications in 2009 amounted to $590 million, and that compares to $21 billion on the human side. Meanwhile, growth on the human side has doubled from 2000 to 2009. That's in sales.

There's no question that antimicrobial resistance is a serious public health threat. It is a complex matter, with no one solution. A 2000 survey published by a group of medical experts estimated that the animal contribution to overall human resistance problems is less than 4%. That small proportion was attributed to the transfer of resistant bacteria from food to humans following use of antimicrobials in food animal production. In my presentation I outlined the chain of events that would have to be traversed by bacteria to move from animals to humans.

In closing, the animal health industry and animal agriculture, along with the veterinary profession, take the issue of antimicrobial resistance very seriously. Discussions on the issue have been occurring within the sector for decades, and measures have been taken to drive prudent and judicious use of antimicrobials.

Thank you.

The Acting Chair (Mr. Tim Uppal): Thank you very much.

We usually give about five or six minutes per organization, but I understand there was some miscommunication, so if the committee will allow I'm going to allow Dr. Prescott a few minutes for his presentation.

Dr. Prescott.

Dr. John Prescott (Professor, Ontario Veterinary College, University of Guelph; Representative, Canadian Animal Health Institute): Thank you, Mr. Chair.

I won't say too much, but I will draw the attention of the committee to the 2002 Health Canada report called *Uses of Antimicrobials in Food Animals in Canada: Impact on Resistance and Human Health*. This was an absolutely outstanding report, which involved considerable work and effort from many people across the country. It made 38 recommendations, including the establishment of CCARs, Canadian Committee on Antimicrobial Resistance. Most of the recommendations have not been acted on. These recommendations included key things like making antibiotics veterinary prescription only, getting rid of own-use and active pharmaceutical ingredient importation issues, prohibiting extra-label use of antibiotics for certain important public health issues, and so on.

I certainly think it would be of great interest to look again at those recommendations, because I think we can improve how we use antibiotics in animals to try to establish national priorities and put one person in charge of the issue of antibiotic resistance in animals and its relationship to humans, as well as antibiotic resistance in human pathogens generally.

Currently, I think nobody in the federal government is in charge, just the resistant bacteria.

Thank you.

● (1540)

The Acting Chair (Mr. Tim Uppal): Thank you. You will have an opportunity during the question period.

We will now have comments from the Canadian Cattlemen's Association.

Mr. John Masswohl (Director, Government and International Relations, Canadian Cattlemen's Association): Mr. Chairman, we had prepared our comments to follow the Chicken Farmers, so with your permission we could defer to Mike Dungate and then we'd follow up later. Would that be acceptable?

The Acting Chair (Mr. Tim Uppal): Okay.

Chicken Farmers of Canada.

Mr. Mike Dungate (Executive Director, Chicken Farmers of Canada): Thank you, Mr. Chairman, and thank you for that accommodation.

Thank you, members of the committee, for allowing Chicken Farmers of Canada to present before you today on judicious use of antibiotics in livestock production.

Chicken Farmers of Canada is a national organization that represents the 2,800 chicken farmers in Canada and the Canadian chicken industry. I'm joined today by Dr. Leigh Rosengren. She is an independent veterinary epidemiologist with ten years of experience. She has worked for governments and industry on these issues of research and issues of antibiotic resistance.

I'm going to focus my comments today. You have our submission, but I'm going to focus down on five key points: some misconceptions that are out there with antibiotic use; CFC's support for government regulation and monitoring; CFC's support for judicious use of antibiotics; an outline of the five-point plan we follow in terms of addressing antimicrobial use and resistance; and finally a couple of recommendations, if I might, for the committee.

Before I move on to our policies, I think it's important that we address the elephant in the room, as it were: a CBC *Marketplace* episode that aired recently, which was designed by its nature to be sensationalistic. However, as such it painted an inaccurate and incomplete picture of the Canadian chicken industry, production, and antibiotic use and resistance. It certainly did not provide a factual or a scientific basis from which government can or should derive policy or options.

I just want to give you a couple of examples. While it was not expressly stated, viewers were left with the impression that the cases presented in the show of human antibiotic resistance were the result of eating chicken. No connection was made, and there is no connection there.

Second, viewers were left with the impression that all antibiotic resistance found in chickens is because of antibiotic use at the farm. As was stated by my colleagues, this is a complex area. Bacteria are endemic, and there are numerous sources. The CBC test results found resistance to antibiotics that are not used in poultry production in Canada. They found resistance to more antibiotics than would be given to a chicken flock. They reported on resistances to antibiotics that have nothing to do with drug use. For example, salmonella and e.coli have a natural resistance with erythromycin, when that drug was never designed for that use, and would never be prescribed for that use.

Third, contrary to what was repeated on the show, the government does have control over antibiotic approvals, it does have control over monitoring and use, and the chicken industry does report on the use of antibiotics.

These examples, and there are more, describe how the episode was misleading and shouldn't be the basis for government policy going forward.

In terms of government regulations, my colleagues here have already outlined the approval processes of Health Canada, the veterinary drugs directorate, and CFIA, so I won't go into that further. It's important, however, to note that all chicken farmers are required by federal regulation to report on the use of antibiotics before the flock is sent to a processing plant. CFIA veterinarians verify these reports and determine that antibiotics are used properly. Any chicken failing this investigation is not allowed to enter the food system.

Taking a further step, Canada has a leading edge surveillance program in the Public Health Agency of Canada's CIPARS, which is internationally respected and is an important component in government oversight and in developing public policy.

On judicious use, CFC has a clear policy. We approve judicious use of antibiotics that have been approved by Health Canada. Antibiotic use in chicken is for the treatment of birds to prevent disease and to prevent potential food safety problems. Antibiotics play a key role in ensuring that only healthy birds enter the food chain for consumption.

Antibiotics are a critical issue for us in terms of consumer trust. Without consumer trust, we don't have an industry. So anything but judicious use would be unacceptable.

I think it's also important to note that a significant amount of the drugs we use on a preventative basis are what are called class 4 drugs, or ionophores, and they are the types of drugs that are of little importance for human medicine. They are the preferred antibiotics we want to move to in terms of ensuring we are keeping those antibiotics that are of importance for human medicine and their efficacy in place.

● (1545)

In terms of the five-point plan that CFC has put in place, we have an on-farm food safety program where all farms have to report mandatory recording and reporting. This is in addition to what they have to provide to the CFIA veterinarian. They are audited on an annual basis. We have 97% of the farms in Canada certified on this program.

Second, we are working with CIPARS on surveillance. We've designed an on-farm surveillance program. Right now there's only on-farm surveillance in hogs and in cattle. We would like to see that extended to the farm level on poultry and we would look for that to be done. We're not waiting for that to be done. We've done some research with the University of Guelph in order to do a pre-pilot project.

Third, we are actively funding research. We've spent almost $5.1 million over the last several years in terms of research into probiotics, developing vaccines, and alternatives.

The Acting Chair (Mr. Tim Uppal): Thank you, Mr. Dungate. You will have some opportunity during the question period to add more comments.

Now we will go to the Canadian Cattlemen's Association.

Mr. John Masswohl: Thank you again for the accommodation earlier, and thank you for the invitation to appear and present before the committee. The Canadian Cattlemen's Association is always willing to appear before members and provide information on various things that are going on in our industry.

I'm going to make a few brief comments, but since I'm not a scientist myself, to the extent that we can keep the subject matter today focused on science, our comments will come primarily from our science director, Dr. Reynold Bergen.

While I'm not a scientist, like members of Parliament, I spent a lot of my time trying to distill various pieces of technical information into good policy. I hope that is the spirit of what we're trying to do here today.

As we do that, I think we can all be assured that food safety is something that cattle producers take very seriously. We're keenly aware that consumers insist that the food they eat be safe. They're purchasing it to feed to their families, to their children, and they have every right to expect that it be safe.

Canadian cattle producers are committed to ensuring that the beef they produce is safe for all consumers, and indeed we are feeding our own families. I have a 14-year-old daughter and a 12-year-old son of my own. You can believe that we eat our share of beef in our house. I have complete confidence in the safety of the beef that I put on my own dining room table.

It's also important to recognize that beef production in Canada operates in a competitive environment. Beef purchasers in both the Canadian and the export markets make buying decisions based on a number of factors. Our daily challenge is to ensure that those consumers have confidence that what we produce is safe and that we produce it at a competitive price.

Over-regulation is a disservice to both the consuming public and to the hard-working people who produce the food. Having the right policies and regulatory operating environment in place is the first step. Ensuring that cattle producers are well trained to follow those policies and adopt good practices is the next step. For that reason, we've developed an extensive on-farm food safety program. We call it verified beef production. Under that program we provide training to producers so that they have all the latest knowledge to produce wholesome and healthy beef.

I'm going to turn it over to Dr. Bergen to speak specifically to the anti-microbial issues, but I would also note that we have Ms. Terry Grajczyk in the room as well. Terry is our national manager for the verified beef production program that I mentioned.

Dr. Reynold Bergen (Science Director, Beef Cattle Research Council, Canadian Cattlemen's Association): Thank for the invitation to come here today.

I couldn't agree more with John's introductory comments and those of the previous speakers that producing safe and nutritious food is the most important thing that Canada's cattle producers do.

It was pointed out earlier, but I'll repeat it: livestock producers and cattle producers use antimicrobial products very strategically.

Ionophores are the main antimicrobial that the beef industry uses. Ionophores are not used in human medicine at all. As a result of that, eliminating the use of ionophores in beef production would not halt or slow the development of antimicrobial resistance and would not contribute to our goal of producing safe and nutritious food.

With this in mind, the CCA developed the verified beef production program to uphold consumer confidence in Canadian beef. This is a HACCP-based on-farm food safety program, and it has received technical approval from the Canadian Food Inspection Agency.

VBP promotes prudent use of veterinary products so that the right product is used to treat the right disease or condition at the right dose, following the right administration route, following the right course of treatment and the correct withdrawal times, and ensuring that leftover product, containers, and what not are disposed of properly.

Finally, one of the most important steps is documenting that all of these steps were actually followed for every animal that was treated. Following label or veterinary instructions regarding the use of these antimicrobials is an important safeguard against the development of antimicrobial resistance.

Preventing antimicrobial resistance is also important to Canada's cattle producers, simply because we want to make sure that these antimicrobials continue to be effective. When antimicrobial resistance develops, the product isn't effective any more. Losing the effectiveness of those tools is something we can't afford to have happen.

Producers use these antimicrobials in a targeted manner because they're costly and also because they need these products to be effective. Cattle feeders use sophisticated and quite often computerized animal health management software systems under the direction of, or in conjunction with, specialized veterinarians.

The dosing systems that are used are accurate to the millimetre and dosages are based on individual animal weight, so the individual animal is getting the right dose of antimicrobial that it needs to address the situation.

● (1550)

The Acting Chair (Mr. Tim Uppal): I'll ask you to wrap up, because you're at the end of your time.

Dr. Reynold Bergen: CCA is also supporting the CIPARS program and is funding considerable research into the issue of antimicrobial resistance as well.

With that, I thank you.

The Acting Chair (Mr. Tim Uppal): Thank you.

We'll now hear from the Canadian Pork Council.

Ms. Dawn Lawrence (National Coordinator, CQA Program, Nova Scotia, Canadian Pork Council): Good afternoon.

I would like to thank you for the invitation to appear this afternoon.

The Canadian Pork Council is a national association representing the interests of Canada's 7,000 hog producers. The Canadian pork industry recognizes the vital importance of using practices that promote the health and well-being of the animals under its care and, through this, the safety of pork.

To support this commitment to food safety, the Canadian Pork Council launched the CQA program in 1998, an on-farm food safety program based upon the principles of HACCP and designed to assist producers in the development of production protocols to address potential food safety risks that could be introduced at the farm.

The use of medications is an important area of potential risk at the farm level. As such, a significant part of the CQA program addresses the use of these products. The program also includes a specific drug use policy requiring that only products approved for use in food-producing animals in Canada may be used.

Producers are required to have a veterinary prescription for all schedule F, part 1 prescription drugs, for extra-label use of any product used in that manner, and they are encouraged to consult with a veterinarian for all other medication use. Any other medication use would fall under the over-the-counter products. These requirements are to ensure that medications are being used effectively to manage herd health.

Additionally, producers are required to develop a medication and vaccine usage plan and maintain treatment records. Each of these items is included in the audit of the on-farm food safety program.

Canadian livestock producers have available to them a toolbox of items that allow them to care for the animals they raise. Like other skilled tradesmen, producers are committed to proper use and maintenance of their tools, thus ensuring that they continue to be useful for years to come.

Producers are responsible for growing a healthy pig destined for the food chain, but they also rely on the expertise of veterinarians for support and education and upon the veterinary drugs directorate and Canadian Food Inspection Agency to ensure correct approval and oversight procedures for medications included in their toolbox.

On-farm food safety programs, like CQA and the others mentioned here this afternoon, provide producers with support in the form of educational tools. They require consultation with a veterinarian on the use of medications and require a regular audit process. The CQA program requires an annual on-farm audit, during which the producer's on-farm food safety system is evaluated by an outside party. The program itself has been reviewed for technical soundness by the Canadian Food Inspection Agency, and the Canadian Pork Council works with the CFIA and Health Canada on many issues, including the use of antibiotics.

Antimicrobials are an invaluable tool in the maintenance of animal health. At the same time, they are a concern in that they can contribute to the development of antimicrobial resistance. The focus of our industry is on using these products prudently.

As of 2009, approximately 94% of Canadian market hogs were sourced from CQA-registered farms. The high participation rate is a result of Canadian processors making it a requirement for producers shipping to their facilities to be on the CQA program. The program has become a condition of sale to most processing plants and an integral part of the industry commitment to quality and safety.

● (1555)

The Acting Chair (Mr. Tim Uppal): Thank you.

We will now hear from Environmental Defence.

Mr. Rick Smith (Executive Director, Environmental Defence): Thank you, Mr. Chair.

[*Translation*]

I will be speaking in English, but I will be happy to answer any questions in French.

[*English*]

Thank you not only for inviting me but for taking the time to study this important issue.

My name is Rick Smith. I'm the executive director of Environmental Defence. I have a PhD in biology.

We're a non-partisan environmental organization that focuses on human health. It's been our pleasure to work with all parties in this Parliament to move forward some highly significant decisions to protect Canadian consumers, decisions like the ban on bisphenol A in baby bottles, an international best practice now emulated by the European Union; the recent announcements that Canada would be matching U.S. and European standards to get toxic phthalates out of kids' toys and to get toxic flame retardants out of consumer electronics; and of course, in the last couple of months, the unanimous adoption by the House of Commons of a modernized Consumer Product Safety Act, finally making Canadian consumer product standards comparable to those in the European Union and in other jurisdictions.

All these were positive steps forward. I would submit that they were no-brainers in terms of good public policy. They were certainly squarely in the interests of Canadian consumers, and they were all supported by all parties in this Parliament.

I think the matter before you today is in this same vein. At least I hope it is.

I'd like to make two points today. The first is that the routine and unregulated use of antibiotics as a growth promotant in agriculture is harming human health and safety. The second is that, just as has happened in Canada over the past few years with respect to the decisions I just mentioned, Canadians surely have the right to expect improvements in the regulation of antibiotics similar to what has already occurred in Europe.

If we go back just a few years, of course routinely treated bacterial infections killed people until the 1950s, when modern antibiotics started to be used. They are an indispensable pillar of today's health system, but without action from the federal government we risk morphing today's annoying ailments back into yesterday's life-threatening risks. The reason is simple: we use too many antibiotics we don't need. This overuse of antibiotics is making bacteria stronger and giving rise to superbugs that our antibiotics can't kill.

When people use antibiotics, a physician must prescribe them, but this is not the case when used on animals, which consume most of the antibiotics in meat- and poultry-producing countries like ours. I want to be really clear here. What we object to, and what I think Canadians have a right to expect their federal government to get a better handle on, is not the use of antibiotics to treat sick animals. We don't object to this. Clearly, this is a reasonable thing to do. What needs to change is the widespread and unregulated use of antibiotics on healthy animals to promote their growth. Canada urgently needs stricter regulations around this practice, especially when some of these same antibiotics are so crucial for use in human medicine.

Environmental Defence has been tracking the issue of superbugs for some time. Most recently our concern was piqued after the CBC TV 's *Marketplace* tested chicken from supermarkets in Montreal, Toronto, and Vancouver. Alarmingly, CBC found antibiotic-resistant bacteria in two-thirds of the chicken it sampled.

Since the 1960s we've known that the overuse of common medicines can create uncommon bacteria. For example, the *Canadian Medical Association Journal* called antibiotic-resistant superbugs "one of the most significant public health issues facing Canada and the world today". So this fact is not in dispute. Governments of all political stripes throughout the world agree, and around the world researchers are developing newer, more expensive, and more powerful antibiotics to fight the superbugs.

Yet as governments, including Canada's, continue to educate doctors and patients about the dire risks that overusing antibiotics creates, the biggest users of antibiotics—animals—are largely let off the hook. Here is an astonishing statistic I want to leave with you. In the United States, it is estimated that 75% of all antibiotics used are not used on people; they're used on animals. In Australia, this statistic is 56%.

● (1600)

It's disturbing that the Canadian public doesn't know with any precision what the similar statistic would be for Canada. And the reason for this is you don't need a prescription and you don't need oversight by veterinarians. The industry is largely free to shovel as many antibiotics as it likes into animal feed.

And this is not a small industry. About 20 animals are slaughtered each year—

The Acting Chair (Mr. Tim Uppal): Could I ask you to wrap up quickly?

Mr. Rick Smith: Thank you.

About 20 animals are slaughtered each year, per Canadian. So to the extent that the government focuses on overuse of antibiotics in people, efforts to curb superbugs are doomed to failure.

Just to wrap up, frankly, I think the question before this committee is simply this: Does the unnecessary use of antibiotics on a healthy animal like a chicken trump the necessary use of antibiotics for a sick child?

Thank you very much for your deliberations today, and I look forward to your questions.

The Acting Chair (Mr. Tim Uppal): Thank you.

And now we will hear from Pew Charitable Trusts.

Dr. Gail Hansen (Senior Officer, Pew Charitable Trusts): Thank you, Mr. Chair and members of the committee.

Good afternoon, and thank you for inviting me.

My name is Gail Hansen. I'm a public health veterinarian and I'm a senior officer with The Pew Charitable Trusts.

I have worked on antimicrobial resistance issues from a lot of different perspectives for over 30 years. I was a state public health veterinarian and epidemiologist with the Kansas Department of Health and Environment, and with a local health department. Before that, I was in private veterinary practice. And before that—actually before I got into veterinary school—I actually worked for the U.S. Food and Drug Administration for a short time when they were first looking at eliminating antibiotics from animal feeds as growth promotants.

The Pew human health and industrial farming section partners with public health leaders, with other veterinarians, with agricultural interests, and with consumer groups to preserve the effectiveness of antibiotics by phasing out the overuse of the drugs in food animal production.

Antibiotic resistance from feeding low levels of antibiotics to animals is real and is here, as you've heard. Antibiotics are legally available and they're readily available over the counter and are fed to healthy animals. These are the same drugs that are used in human medicine to fight disease. The antibiotic use in food animals in the United States and Canada is very similar, as is the lack of monitoring the use of other drugs and the reporting of the drugs.

It's also very similar that we are seeing an upward trend in antibiotic resistance in bacteria both in animals and in people, and we are seeing that all over the world. And there is an upward trend in the number of bacteria that are becoming resistant to the antibiotics we have on hand.

The CBC report from last month that found bacteria in about three-quarters of the tested chickens, and all the bacteria being resistant to at least one antibiotic and several of them being resistant to multiple antibiotics was not a surprise to me. In the United States, certainly in 2008, nearly all of the chicken that was tested was contaminated with at least one bacteria. And if one of the bacteria is a salmonella, which we find in about half of our chickens, 38% of those salmonellae are resistant to three or more antibiotics.

So it's not really an overstatement to say that antibiotics are overused in industrial farming to the detriment of human health. Animals are fed low levels of antibiotics for growth promotion and in the absence of disease. This is to compensate for some of the overcrowded and sometimes unsanitary conditions and is used as a fix for good practices. And when bacteria come in contact with low levels of antibiotics, it makes it easier for them to become resistant to antibiotics, the “what doesn't kill you makes you stronger” kind of thing. That resistance gets transferred to people. Ultimately, then, the antibiotics we've used to treat disease don't work for animals or for people.

The CIPARS, the Canadian Integrated Program for Antimicrobial Resistance Surveillance, published in 2010, in a peer-reviewed journal, that they found a rise in ceftiofur resistance in a common salmonella in both chickens and people. Ceftiofur is an antibiotic that's routinely injected into chicken eggs just before they're hatched. That drug, ceftiofur, is nearly identical to ceftriaxone, a drug used to treat children and pregnant women.

In Quebec the hatcheries voluntarily stopped that practice, and when they stopped injecting the ceftiofur they saw a great drop in the resistance of salmonella to ceftiofur, both in chickens and in humans. When they lifted that ban a little bit, again they started to see a rise in the antibiotic resistance in people and in chickens.

The WHO has looked at fluoroquinolones, which is another antibiotic. You may know it as Cipro. When it was first licensed for human therapy, there was no immediate rise in salmonella resistance seen. But then when the Cipro, or fluoroquinolones, were licensed for use in food animals, the rates of fluoroquinolone-resistant salmonella went up both in animals and in humans.

The good news is that we do have effective alternatives to using a low level of antibiotics for farmers and ranchers. The EU has banned the use of antibiotics as growth promoters in meat and poultry since 2006. And the ban on the antibiotics as growth promoters was followed in subsequent years by substantial decreases in food-borne illness in Europe.

It would seem to me that Canadians deserve the same, and you can do it if you follow the EU's lead, it would seem.

● (1605)

In Denmark they have industrial farms that are very able to efficiently raise pork and poultry without the use of antibiotics except when the animals are sick. The farmers give antibiotics when they're prescribed by a veterinarian for a specific disease only. They found that if they just banned the use of antibiotics for these non-therapeutic uses, it wasn't enough. They had to really work with their veterinarians and others to find some other effective management strategies.

This is a very opportune time, because the WHO has declared April 7, 2011, as World Health Day. The focus this year is on antimicrobial resistance, in an effort to safeguard antibiotics for future generations.

The U.S. Food and Drug Administration has announced that it will take two significant steps this year to curb the overuse of antibiotics in our food production. First, the FDA is preparing guidance that we're hoping will advise the industry to not use antibiotics for growth promotion and other non-therapeutic purposes, and to not feed antibiotics to healthy animals. Second, the agency is looking at implementing a ban on the off-label use of a drug called ceftiofur in animals. That drug is vital in treating pregnant women, children, and cancer patients. We can't lose the ability of antibiotics to treat us when we're sick, and certainly not because we're feeding them to healthy animals.

Thank you. I'm open for questions.

The Acting Chair (Mr. Tim Uppal): Thank you all for your opening statements.

We will now go to questions by members. Our first round will be for seven minutes, led by Mr. Dosanjh.

Hon. Ujjal Dosanjh (Vancouver South, Lib.): Thank you all for making your presentations.

I actually don't even know where to begin.

Mr. Smith and Ms. Hansen have expressed a very serious indictment of practices in the industry, such as feeding antibiotics to healthy animals, and the overuse of unprescribed antibiotics. Obviously it is a serious situation in the country if you can find some presence of antibiotic resistance in two-thirds of the chickens sampled across the country, and some of them have up to seven or eight antibiotics present.

So is the industry prepared to voluntarily—because we don't have a law at this point—stop using antibiotics, at least on healthy chickens and other healthy animals?

● (1610)

Mr. Mike Dungate: Thank you, Mr. Dosanjh, for your question.

Let's start this way. As I said, Chicken Farmers of Canada believe that judicious use is the way to go. So do we just want to measure antibiotics by tonnes and reduce in that sense, or do we want to make sure we are moving away from those antibiotics that are of human health importance? You've heard from all of the industry that the drugs—

Hon. Ujjal Dosanjh: You haven't answered the question.

Mr. Mike Dungate: The antibiotics we are using—especially the preventative ones—are for the most part class IV ionophores that have little or no human health relationship. So do we want to just reduce the amount of the ones that don't have a human connection, or are we more interested in finding out what the real issues are in terms of it, and taking a smart approach to making sure we reduce them?

Hon. Ujjal Dosanjh: The question I have is why are we using antibiotics on healthy animals, sir? Can you answer that question?

Mr. Mike Dungate: This is preventative medicine. That is the point, and this is what we found in Europe. I'll ask Dr. Rosengren to talk about the European experience and what the real impact there is. As you move away from preventative antibiotics, if you have to treat a sick bird you're going to use the antibiotics that are more important, and you're going to use more. That is the experience they've had in Europe.

Let me ask Dr. Rosengren to explain the result of that experiment in Denmark. We don't necessarily need to follow that lead; we need to follow a smart lead that we're doing in Canada right now with the government.

Dr. Leigh Rosengren (Representative, Rosengren Epidemiology Consulting, Chicken Farmers of Canada): Thank you.

I'll attempt to address your questions as best as possible.

It's not a simple question to stop using antibiotics inappropriately, because it's a very grey and complex area.

Dr. Hansen raised two key issues. One was the use of ceftiofur, and the second was the use of growth-promoting drugs. Those are two opposite spectrum issues. One is the use of a class I drug that's classified as critically important for human medicine. It is used in the chicken industry strategically for one particular issue, which is omphalophlebitis in young day-old chicks. The other is an issue of using drugs that are unimportant to human medicine, or class IV drugs, to prevent subclinical disease from becoming clinical.

So your question is very complex, because it deals with a myriad of issues to stop using antimicrobials in these instances.

Hon. Ujjal Dosanjh: Do you have a practice in your industry to use prescribed antibiotics? Yes or no.

Mr. Mike Dungate: Yes, absolutely we do.

Hon. Ujjal Dosanjh: Do you use unprescribed antibiotics?

Mr. Mike Dungate: Everything, every—

Hon. Ujjal Dosanjh: I mean antibiotics not prescribed by a veterinarian—not approved by Health Canada, but not prescribed by a veterinarian.

Dr. Leigh Rosengren: Yes, Health Canada has many, many drugs available in the veterinarian pharmaceutical industry that are considered over-the-counter. Hence they are available without prescription as antibiotics. That goes back to the comment Dr. Prescott made about the report recommendations to Health Canada. That is an issue in Canada.

Hon. Ujjal Dosanjh: Are you currently using antibiotics, as is alleged by both CBC and the two colleagues of yours who are mentioned, as growth promoters in the industry?

Dr. Leigh Rosengren: Today in the industry there are certainly drugs licensed for use as growth promoters. In theory, yes, producers are using those drugs according to the label put on by the VDD. In general, our experience from the EU situation has been that although it is termed "growth promotion", in general what the drug use is doing is suppressing subclinical disease that without that antimicrobial exposure would lead to explosive clinical outbreaks that not always, but often, would require further antimicrobial therapy.

So yes, there are drugs licensed for that in Canada as we speak.

● (1615)

Hon. Ujjal Dosanjh: By drugs licensed, you mean that the drugs are approved for use, but you don't have to use them unless your chickens are sick. You use them to prevent them from getting sick, and they grow faster, and they're unhealthy. Am I right or wrong?

Mr. Mike Dungate: We make sure that we have healthy birds. We have an on-farm food safety program that makes sure that we stop the introduction of bacteria. We try to reduce the load there. We have a different production system from what they have in the U.S. In our system, you clean out those barns after every single flock. They're primarily cement floors, not dirt floors, which goes on in the U.S., so there is not a bacteria load that goes from flock to flock. We thereby reduce the amount we need to use in this country.

We try to reduce the use any way we can, and good management practices are a key to that. We have 97% of our farmers on that program. We're working to make sure that we have to use only as much as we need to keep a healthy flock and to make sure there is safe chicken going into the marketplace.

Hon. Ujjal Dosanjh: I guess that's what you define as judicious use.

The Acting Chair (Mr. Tim Uppal): Thank you.

We'll go to Monsieur Malo.

[*Translation*]

Mr. Luc Malo (Verchères—Les Patriotes, BQ): Thank you very much, Mr. Chair.

Ms. Rosengren and Ms. Hansen, you seem to have different opinions of the current situation.

[*English*]

The Acting Chair (Mr. Tim Uppal): Has everybody had an opportunity to get your earpieces in?

[*Translation*]

Mr. Luc Malo: Is everything alright, Ms. Hansen?

Ms. Hansen and Ms. Rosengren, you seem to have different views of Europe's experience with banning the use of antibiotics on healthy animals. Could you explain to me why that is?

You seem to be saying that banning the use of antibiotics on healthy animals had had a direct impact on human health. However, Ms. Rosengren seems to disagree with that statement. I would simply like you to clarify the matter for me.

[*English*]

Dr. Gail Hansen: Okay, I'll give it a go first.

I've actually been to Denmark and have talked to the Danes and have seen how they raise both their pigs and their chickens. They will tell you themselves that while they're certainly willing to look at any new data, they don't want to have somebody else interpreting their data. The Danes themselves and the EU have said that when they took away antibiotics for non-therapeutic use—which means giving them to healthy animals—they saw a decrease in antibiotic resistance in the animals. They're still looking at it in people. It doesn't happen automatically. Sometimes it doesn't happen. That's the problem. If you get resistance to an antibiotic, sometimes that antibiotic resistance doesn't go away, and then we've lost that antibiotic forever.

Dr. Leigh Rosengren: I apologize if I appeared to disagree with Dr. Hansen.

The EU model has been successful for the countries in the European Union, but we have had very different legislation on veterinary antimicrobials in our country, in North America, dating way back to the 1970s. It's not as if you can cut and paste the legislation that they have. We have a completely different system.

The reason we appear to disagree is that antimicrobial resistance is an extremely complex issue. We're talking about multiple commodities; and within each commodity, multiple bacteria species; and within each of those bacteria species, multiple resistance concerns driven by multiple drugs. It's easy to get lost in the details and draw on something that's a success, or dismiss something else as a failure.

Overall, it's a flawed experiment because there's no control to the situation. We don't know where the situation would have been without the withdrawal of the growth-promoting drugs, and we haven't done a very good job of measuring the farm-level drug use and correlating that all the way through to the clinical instance of disease in people.

● (1620)

[*Translation*]

Mr. Luc Malo: How is the situation in Europe different from that in America? You said the situation was complex. As I see it, the situation is equally complex in Europe. I would think the implications are the same for European animals. I simply want to understand in what way the two situations differ.

[*English*]

Dr. Leigh Rosengren: Go ahead.

Dr. Gail Hansen: I was just going to say that bacteria don't carry little lapel pins of what country they're from. So the resistance is the same no matter where you're at. Denmark, for example, saw some problems with some of their pigs to begin with, and that's why I said they couldn't just stop using the antibiotics. They had to figure out what else needed to be done. They figured it out pretty quickly. I think of Denmark as a success story, since they are the number-one exporter of pork in the world. They've increased their pork production 40% since they've taken out the antibiotics for non-therapeutic use.

Ms. Jean Szkotnicki: I happen to have the Denmark map report for 2009. I'm reading right from the document, so this is the Danish experience. It says that for production animals in general, the consumption of antimicrobial agents has increased by 59% from 2000 to 2009, mainly because of an increase in consumption of antimicrobials in pork production.

That's the removal of the growth-promoters. It required that additional drugs be used to treat animals therapeutically, because they were getting sicknesses. It's a complex issue. By removing some of the products from production, you don't necessarily eliminate use—in fact you may increase it.

Time will tell, as Dr. Hansen was saying. Certainly the resistance in humans hasn't been affected in the Danish experience, from what I understand. Yes, there's been a reduction in the animal population, but one would expect that when the use has been reduced. But did it change in the human population? After all, that's what these bans have been about, to get outcomes relevant to the treatment of humans.

[*Translation*]

Mr. Luc Malo: We are not in a position, at this stage, to determine if human health has been affected in some way. Correct?

[*English*]

Ms. Jean Szkotnicki: They continue to monitor it, but you haven't seen dramatic changes in human health in the Danish experience, from what I understand. The situation is similar in some of the other European countries where they're doing the monitoring.

Dr. Gail Hansen: However, I would point out that this is ongoing. If we lose the effect of an antibiotic, we may never get it back.

There's an antibiotic used in this country and in the United States, Cipro, that can be used on people for a disease called campylobacter, which is like salmonella, a bad vomiting, diarrhea disease. The level of resistance to that antibiotic was very low until we starting using it on animals. Now Cipro is rarely used as a first drug of choice for diarrheal diseases in this country or in the U.S. However, in Australia, where they never allowed it for use in animals, the resistance to Cipro for campylobacter is still very low, so that they are still able to use that drug in Australia.

The Acting Chair (Mr. Tim Uppal): Thank you.

Ms. Leslie, go ahead.

Ms. Megan Leslie (Halifax, NDP): Thank you, Mr. Chair.

Thank you all for your testimony. I have learned a lot from your testimony. When Ms. Hansen was describing the situation in Denmark, that antibiotics are prescribed for sick animals and for specific diseases, I would have thought that was the case here in Canada. It is unbelievable to me that it is not.

My colleague Mr. Dosanjh was unsuccessful in securing voluntary commitment to banning the use of antibiotics in livestock that is not actually sick.

My question is for Ms. Hansen and Mr. Smith. Because we are legislators, I am looking for a solution. How do we do this? The EU banned this in 2006. How can we do this in Canada? Is it as complicated as we're led to believe?

● (1625)

Mr. Rick Smith: Before I answer that, if I could just go back to Monsieur Malo's questions a little bit and just point out that, in terms of concrete evidence linking declines in bacterial resistance in humans and better policy, you don't have to look any further than a study last year from Quebec, which Dr. Hansen referred to. After producers voluntarily stopped using ceftiofur for a few months, there was a dramatic decline in ceftiofur resistance in both food and in people. When they started to use it again, resistance started to increase. Interestingly, as Canadians and talking about this here, one of the smoking-gun studies now referenced on the international stage is the Canadian study, which I hope the committee would take a look at.

I just wanted to add that, before perhaps Dr. Hansen answers.

Dr. Gail Hansen: In the United States, we have also looked at legislation. For 40 years they have been looking at having the industries voluntarily change what they have been doing. That hasn't worked especially well, because there still is an awful lot of it that's used, even excluding the ionophores, which has been talked about, which is an antibiotic not used in humans. But even excepting that, there are an awful lot of antibiotics used for healthy animals.

In the United States we're contemplating—our Food and Drug Administration, which would be similar to Health Canada's VVD—disallowing that approval that they approved, similar to what they did here. They approved that back in the 1950s and 1960s, when we thought we were going to have a new drug every week. Our FDA is looking at changing its guidelines and we're also looking at a legislative fix so that antibiotics can be used for sick animals, if they are prescribed by a veterinarian, or for animals that have been exposed to disease, but not for healthy animals.

Ms. Megan Leslie: Are there pitfalls from the EU experience that we need to know about?

Dr. Gail Hansen: Certainly in Denmark they did have some trouble, especially with their weaner pigs to begin with. Those are pigs that are just leaving their mamma and eating on their own. It took the Danes about six to nine months to figure out what they could be doing instead. They are trying very diligently to keep down the amount of antibiotics they are using, but, as has been pointed out by others here, it isn't just the amount of antibiotic but how you are using it. If you use a very low level all the time, it would be like feeding your children antibiotics with their breakfast cereal every morning to make sure they don't get disease later on.

Mr. Rick Smith: If I could comment on your question about what statute is required or regulations are required, in the wake of the CBC report, we're doing a more thorough analysis of this. BPA in baby bottles, phthalates in kids' toys, flame retardants in consumer electronics—obviously non-food items—none of those important changes of the last couple of years required any new statute. It was regulatory. In this case, what we are talking about is simply improved regulation and improved monitoring.

Ms. Megan Leslie: Can you help me with the analysis you're doing? We have the CFIA that ensures that drugs are being used properly. We have CIPARS, which is part of the Public Health Agency, and they monitor antimicrobial resistance. We have the veterinary drug directorate, and they approve drugs for livestock.

I don't know where the health piece is. Who is looking out for the health of Canadians? Are you able to answer that?

Mr. Rick Smith: I was very interested in Dr. Prescott's comment citing the 2002 report that states responsibility for this is all over the map. I would agree.

You have, for instance, this strange situation where CIPARS is publishing information, ringing an alarm bell essentially, and pointing to that recent Quebec study. But it's like a joke with no punchline. There was no next step coming from them. So I do think that's a—

● (1630)

Ms. Megan Leslie: Yes, that was an interesting comment you made.

Dr. John Prescott: The approval of drugs is a federal responsibility. It is done through Health Canada and monitored partly by CFIA. The use of antimicrobial drugs is a provincial responsibility, through the veterinary acts or livestock medicines acts.

There's this federal-provincial crack, which means, for example, with the ceftiofur story, if you wish to say you can't use ceftiofur extra labelling for injecting chickens, the only thing you can do federally is put a warning label on saying there may be problems of resistance. But there's no way currently under the regulations to say you cannot use ceftiofur extra label for injection of chicks, let's say. There's no way to do it.

The Acting Chair (Mr. Tim Uppal): Ms. Leslie, Mr. Dungate had something as well.

Mr. Dungate.

Mr. Mike Dungate: With regard to CIPARS, I want to make it clear: Chicken Farmers of Canada has worked closely with CIPARS, and CIPARS itself wouldn't come to the same conclusions that Mr. Smith has.

We've gone through this and this connection on ceftiofur in Quebec. CIPARS will admit it has done research at a human level, a retail level, and at a processing level, but to date there has not been any surveillance done on-farm in poultry.

The other thing that is key, and we keep going back to this point, is that because it was withdrawn in Quebec it had a correlation there. The chicken produced on one farm is not necessarily shipped to a processing plant in that province. The chicken from that processing plant in that province is not necessarily shipped to retail stores in that province. There is no causal link. There is a correlation there, but there is not a causal link.

The Acting Chair (Mr. Tim Uppal): Thank you.

Dr. Carrie.

Mr. Colin Carrie (Oshawa, CPC): Thank you very much, Mr. Chair.

I want to thank everyone for coming.

I find the discussion we're having this afternoon quite interesting. I think everybody would like to see a reasonable use of antibiotics, but I think it's important, at least for me, not to confuse the issues. I think there is still a little confusion around the table, and I want to clear something up.

I have a question for Mr. Dungate. Madam Hansen had a comment that was concerning to me: it was like feeding children antibiotics in their cereal to prevent kids getting sick. I think the analogy is that this is what we're doing when we feed livestock preventative antibiotics.

I was listening to what you said in response to Mr. Dosanjh. My understanding is that if you use fewer preventative antibiotics, what you call ionophores, you could potentially get increased disease in the flock. Then you would have to use more of the antibiotics that you would use in humans, which may lead to an increased resistance.

Is that what you said earlier? Was I understanding it?

Mr. Mike Dungate: Yes. I think this is the key part. We keep talking about healthy birds and sick birds. When you have an incident in a barn and you have sick animals, you need to treat those animals. We have animal welfare regulations in this country that say you must treat that flock.

Generally when you get an outbreak in a disease you have to use a more powerful antibiotic, and you have to use one that is more important for human medicine. That is the resistance we're concerned about.

As Dr. Rosengren tried to point out, it isn't just that it's a healthy bird and it's not just that it's growth promotion, there's a...I think you called it a subclinical part. I wonder if you would repeat that piece for us. I think it's important.

Dr. Leigh Rosengren: Sure.

Disease in a flock—we're talking about population medicine, not individual animal medicine here—is like a scale, from white to black with every shade of grey. In these flocks we don't have healthy and unhealthy, we have every spectrum in between.

If we wait until birds are clinically ill, those birds are spreading pathogens into the barn and we get a cycling and an amplification. It's like an avalanche effect. By using antimicrobials prudently and early, on a flock basis we can prevent that disease from rising.

I'd like to go back to Ms. Hansen's point about the European Union experience. You're right that they were very successful in raising livestock without growth promotional antibiotics. I concur with that point. What they have not been successful in doing is raising livestock without antibiotics.

They have removed those growth promotional antibiotics, and they've had to go to the higher-powered therapeutic drugs that are important in humans. I guess that goes back to Mr. Smith's point, with which I completely concur. I don't think we should be willy-nilly using these very important antibiotics either. That's why it's very important to maintain our available repertoire of antibiotics for the judicious use by veterinarians.

● (1635)

Mr. Colin Carrie: I agree. I just wanted to make sure I clarified what you were saying, because there appeared to be some confusion around the table. None of us wants to be alarmist, and I think in Canada we can rest assured we have one of the safest food systems in the world. But Mr. Smith asked if it makes sense to use antibiotics on healthy chickens, to trump antibiotic use in a sick child. Is that really the question we should be asking here? Dr. Bergen, I don't think you've said anything. Can we get a comment from that side of the table? Dr. Rosengren, does that make sense? I would like to get the doctors' comments on that.

Dr. Leigh Rosengren: I think you're right, that's not the point. It's not an either-or situation. By using low in-feed antimicrobials on a flock or herd basis to prevent disease, we're ensuring that only healthy birds or pork or beef make it to market. So it's not an either-or; we're trying to protect the safe food supply in Canada.

Mr. Colin Carrie: So the way I'm understanding this, you use these preventive antibiotics, or what you call class IV ionophores, and they're antibiotics we typically don't use in humans and you're doing that so the birds or the products don't get sick so you don't have to use the really important antibiotics used for human consumption. Is that right? Jean, I see you nodding your head too. Am I getting it? I'm trying to figure this out around the table. Do you have a comment?

Ms. Jean Szkotnicki: Back to a statement made by Mr. Smith—I think it was Mr. Smith—that 75% of antimicrobials are used in food animal production, I think one of the points we were trying to make.... I don't know what the percentage is in Canada, but I have seen some data that said that of those, 45% have no relationship to human medicine, and a lot of these ionophores are used in production of beef, pork, and chicken.

Mr. Colin Carrie: Thank you very much for that.

Mr. Dungate, you mentioned the *Marketplace* piece, and I must confess I haven't seen it yet. I do plan on watching it. Would you like to comment on the conclusions of that piece on TV that prompted or had something to do with this meeting?

Mr. Mike Dungate: I think our point is we're working closely with CIPARS. CIPARS knows there's a gap in the data and CIPARS has a very rigorous testing process. That is the type of study that needs to be done, and we're getting there.

One of the recommendations we would have before the committee is Chicken Farmers of Canada has developed the CIPARS protocol with CIPARS on-farm testing. We want to move ahead with it. We're the only commodity of those here that hasn't had the on-farm testing. We want to have that. We want to know and understand what that connection is, because we want to make good decisions. We don't want to make them on the basis of a study that, in our view, was questionable in terms of the protocols it used.

The Acting Chair (Mr. Tim Uppal): Thank you very much.

We are now going into our second round of questioning, a five-minute round.

Dr. Duncan.

Ms. Kirsty Duncan (Etobicoke North, Lib.): Thank you, Mr. Chair.

Thank you to all the witnesses.

I'm going to begin by asking for a number of you to table some information with the committee, if you'd be so willing.

First, I would ask the various animal organizations to table the number of animals that have actually been removed from the system for inappropriate antibiotic use.

Second, I'd like to know how each of you defines “judicious”. That's a very loose term. I'd like to know what that actually means in terms of dosage, usage, etc.

Third, how many pounds of antibiotics are given to livestock? I know people didn't want to go into pounds, but I'm going to ask it anyhow. How many pounds are given to livestock per year, and what percentage of that is given to treat disease? In the U.S. I believe the figures are 25 million pounds of antibiotics given to livestock and three million pounds given to treat disease.

The last request is for Dr. Hansen and Dr. Prescott if they would be so willing. Dr. Prescott, you talked about the 2002 report. You thought it was a very good report, but you said a number of those recommendations had not been followed up on. So I would like to know which of those recommendations have been completed and which have not.

Thank you.

Now I will ask some questions, if I may.

I think it's been brought up that the U.S. FDA released draft guidelines in June on the judicious use of medically important antimicrobial drugs. Has Canada undertaken a similar study since 2002 or produced draft guidelines?

Dr. Hansen.

● (1640)

Dr. Gail Hansen: I wish I could tell you for sure, but I'm not sure I know the answer to that. I do know that, as has been mentioned, the veterinary drug directorate here in Canada issues guidelines, but the enforcement of that, if you will, is really a provincial matter, and that's different from how it is in the United States.

Ms. Kirsty Duncan: But we don't know if there's been any update in guidelines? I think Dr. Prescott wanted to get in there.

Dr. John Prescott: I'll hand it over to Jean. I'm not aware of any.

Ms. Jean Szkotnicki: As part of our submission review, we do have guidelines that outline the technical requirements a new drug would have to meet in order to be licensed in Canada. Companies must conduct studies to meet those standards, and those are reviewed and assessed by the veterinarians at Health Canada.

So that is guidance in the human safety department. Then based on their risk analysis, they will also schedule drugs. So you have schedule F, part I drugs, similar to what is on the human side, which are prescription—

Ms. Kirsty Duncan: Okay, I'm going to interrupt there, because that's not where I was going to go, but thank you.

Dr. Hansen, could I come back to you? The FDA sets forth its recommendations for food producers to discontinue using medically important antimicrobials on healthy animals for growth promotion purposes and instead reserve them for disease treatment and prevention. It has also recommended that food producers use such drugs only under veterinary consultation. Could you comment on those recommendations?

Dr. Gail Hansen: Yes, that's exactly how the draft guidances are today. They're still getting comments. They got literally thousands of comments from people who thought that was a good idea—

Ms. Kirsty Duncan: What is your opinion on that?

Dr. Gail Hansen: I think it's a very good start. In the United States those are just guidelines, and the industry has had similar guidelines and has had, as you said, judicious-use guidelines for 30 to 40 years. We don't think we've seen a change in the amount of antibiotic that's used.

I would also like to respond with regard to the amount of antibiotics sold in the United States for food animals versus what's sold in the United States for human use. Three-quarters of the antibiotics are used both in humans and in animals. Three-quarters of those antibiotics are used in food animals. If you add the ionophores, which keep coming up, because they're not a drug for humans, then that figure for the United States goes up to over 80%, and that isn't tracked here in Canada.

● (1645)

The Acting Chair (Mr. Tim Uppal): Thank you very much.

Mr. Hoback, you have five minutes.

Mr. Randy Hoback (Prince Albert, CPC): Thank you, Chair.

I thank everybody for coming here today. This is a great discussion.

I don't think there's one Canadian in Canada who isn't concerned about the improper use of any type of antibiotic or drugs in that case. This is a good discussion to have.

At first glance, when you look at it you think, “Oh my God, this is horrible”, but when you actually start to dig down and see exactly what's going on, it's an example of there being a lot more to the story than just the headline.

I'll start with you, Mr. Dungate.

The chicken industry is using antibiotics that are not being used in the human chain. I'll use that expression—maybe it's not correct, but as a farmer from Saskatchewan, I'll use those words. In the process of putting the antibiotics in the feed, you are actually using antibiotics that would not normally be used in a hospital or that type of situation. Is that fair to say?

Mr. Mike Dungate: That's fair to say, correct.

Mr. Randy Hoback: You're actually looking at ways to ensure we have healthy livestock coming through the system and make sure we're not building up any type of resistance to antibiotics that would be used in a hospital situation. Is that fair to say?

Mr. Mike Dungate: That's correct, and this is one of the things that comes out in the study.

It isn't just by antibiotic use that you develop resistance. That resistance is endemic out there. It comes in the environment. That's why from a management perspective, for example, for all of our flocks we clean out all the litter, take it down, clean, and disinfect the barn, because we're trying to make sure the environment is good and we don't get resistance building up from one flock to the next flock.

So it isn't just in the use aspect; it's also management practices and our on-farm food safety program. We're tackling this from as many different perspectives as we can.

Mr. Randy Hoback: You have a system of best practices established for your barns.

I know the hog industry. If you want to visit a hog barn, after you shower and go through the scrubbing process, you may actually be allowed to enter the hog barn. Is it similar in the chicken industry?

Mr. Mike Dungate: It is very similar in the chicken industry. We put in place our on-farm program back in 1998, but it has been updated. It's the biosecurity part that is really doing it.

In fact, we found that the biggest transmission and cause of bacteria entering is from other service industries within our industry, not people from the city who come and have none of that connection. So we've really tightened that down and I think we're going to see the results of that.

Mr. Randy Hoback: On this issue, how do we educate the general population on your responsible use of the antibacterial drugs right now? Are there any ideas on that? As I said, at first glance at the headlines, you say “Oh my God”, but then you start to dig down into it. Do you have any suggestions on that?

Mr. Mike Dungate: This is where we think we need to understand for ourselves. Our farmers need to understand what that connection is. This is where we're talking about the CIPARS on-farm study. Where is that resistance coming from? We want to do the testing when those chicks arrive in the barn and then at 30 days and see if there's a difference that happened in the barn. Is there something coming in with the chick before we even get there? Where is it from?

I think a key part is making sure we carry on and get a causal link. As Dr. Rosengren said, we need to try to take the grey down to fewer shades of what we've got, and then we can make some real decisions in terms of the policy we want to have.

Mr. Randy Hoback: When we look at comparing countries to countries—for example, the European situation to Canada—we always hear that the Europeans do it this way and we should do it this way in Canada. The reality is that when we go through, for example, PMRA for pesticide use, we look at it in the environmental conditions in Canada, which are different from the environmental conditions in another part of the world.

How valid is it to take a study from Australia or Europe and put it into Canada?

Mr. Mike Dungate: Dr. Rosengren might add a couple of things, but I think there are a couple of points here.

It isn't just the environment we're in, and that's a key part, but it's also the regulatory environment and what is approved. There are vaccines that are approved in some countries that are not allowed in others.

You're probably aware that in a lot of agriculture we have issues in terms of approving what I'll call “antibiotic alternatives” in this country, because the manufacturers don't see a big enough market for us in the animal sector here in Canada and therefore they're not approved. We need the ability to use other alternatives that other jurisdictions might have.

● (1650)

The Acting Chair (Mr. Tim Uppal): Thank you very much.

Monsieur Malo.

[*Translation*]

Mr. Luc Malo: Thank you, Mr. Chair.

I have a question for you, Mr. Dungate, and then I will yield the floor to my colleague Ms. Beaudoin, who also has several questions.

You told us that $5.1 million has been invested in research. Mr. Bergen also mentioned money invested for research purposes. I am just wondering about what percentage of this amount was invested in efforts to find alternatives to antibiotics and what results were achieved.

Did your research lead to any advances in this area?

Mr. Mike Dungate: Thank you for your questions, Mr. Malo.

We have invested $5.1 million in the poultry industry, with all of this money going to research into antibiotic resistance and alternative solutions. Real discussions are underway.

I'm going to switch to the other language, because this is too technical.

[*English*]

It's gut microbiology, and to understand what is going on inside the bird so we can create healthy bacteria alternatives and treat it that way. Those are called probiotics. So there's a lot of investigation there.

In our submission we have included a list of the projects that have been funded with that $5.1 million, and it's ongoing. We're just starting to see the results of that research coming in. Many of them are three- or five-year projects.

[*Translation*]

Mr. Luc Malo: So then, if I understand correctly, we can expect to see some results shortly.

Mr. Mike Dungate: That's right.

Mr. Luc Malo: Go ahead, Madam Beaudoin.

Mrs. Josée Beaudin (Saint-Lambert, BQ): Thank you very much.

Thank you for joining us today.

I would like to come back to something you said earlier, Ms. Rosengren. You said you administer antibiotics to all of your birds, because they are at different stages of a disease and because you want to avoid having to use more powerful antibiotics.

Are you saying that antibiotics are administered to chicks as well as to adult birds?

[*English*]

Dr. Leigh Rosengren: It does not necessarily mean that they have to be medicated right through to market. By giving antimicrobials early in the course of a disease you can often prevent that bacterial population from having an explosive growth, in which case the bird's own immune system can come in, catch up, and take care of that, resulting in a healthy flock.

[*Translation*]

Mrs. Josée Beaudin: So then, you do not necessarily medicate across the board when an infection occurs.

[*English*]

Dr. Leigh Rosengren: Pardon me. I think I misunderstood the interpretation.

In the poultry industry specifically—and it is different for beef and pork—when a flock is medicated it is on a flock basis. That's for two reasons. One is the feasibility of getting the medication into those birds, because they're housed in very large groups. The other is because of the design of the chicken. For most animals it's only a fecal-oral route for exposure to disease, but chickens also sample the environment from their cloaca. So we need to treat them as a flock or a population in order to get a handle on that disease.

[*Translation*]

Mrs. Josée Beaudin: Does a healthy bird that receives an antibiotic not develop some resistance?

If they became infected and you administered a stronger antibiotic, what would happen?

[*English*]

Dr. Leigh Rosengren: Number one, the birds do not necessarily develop resistance, just as if you were given a course of antibiotics you would not necessarily end up with a resistant pathogen at the end of that. We don't necessarily have to go to stronger and stronger drugs.

There are prudent-use guidelines among the poultry industry that they have developed to mitigate that risk. So they're very conscientious about that. These are their only tools as producers. So veterinarians and producers have developed protocols to avoid that very situation.

[*Translation*]

Mrs. Josée Beaudin: I'm also concerned about something you said earlier, Mr. Prescott.

There is no one at the federal level responsible for monitoring antibiotic resistance. Yet, I think this is an important issue.

What are you proposing? Should the federal government be stepping in quickly, setting up a committee and appointing someone to monitor the situation?

● (1655)

[*English*]

The Acting Chair (Mr. Tim Uppal): A very short answer, Mr. Prescott, if you can, please.

Dr. John Prescott: Put one person or one group in charge. There are overlapping jurisdictions federally, which is the problem. There's the Public Health Agency and the veterinary drugs directorate and you need one person in charge. The medical physicians want that. The veterinarians want that. Then try to deal with the federal-provincial crack.

The Acting Chair (Mr. Tim Uppal): Thank you very much, Dr. Prescott.

Ms. O'Neill-Gordon.

Mrs. Tilly O'Neill-Gordon (Miramichi, CPC): Thank you, Mr. Chair.

Thank you all for being here this afternoon.

I certainly listened with interest to each of your presentations and found them very interesting. I was glad to hear you confirm that the CBC *Marketplace* episode was in great proportion misleading and sensational. I happened to watch that, and after I watched it I thought, is this really true, or is this just something we're kind of pretending?

I do have some questions. We know that when antibiotics are used in humans, it's solely for the treatment of a bacterial infection, while antibiotics are often included in animal feed to promote growth. Health Canada has approved a number of antibiotics for growth improvement in livestock. I'm wondering how long this practice has been in place.

Ms. Jean Szkotnicki: I don't know exactly, but I'm going to say several decades.

Mrs. Tilly O'Neill-Gordon: Okay.

Of what benefit is it to the industry?

Dr. Leigh Rosengren: I hate to repeat myself....

Pardon me, Dr. Bergen.

Dr. Reynold Bergen: I'll start answering your question by taking a shot at the first one that was addressed to me 15 minutes ago, and hopefully my response to yours won't take as long to formulate.

Part of the reason it took me so long to come up with an answer is that I'm still wracking my brain trying to figure out what sort of disease my five-year-old or seven-year-old daughter would get that I would use ionophores to treat. The drugs that are used in beef cattle for the promotion of growth and feed efficiency are ionophores and they are not used in human medicine at all.

I think that's a really important point to keep in mind, that removing this tool from the livestock industry, whether it's cattle or dairy or chickens or pigs, is not going to benefit human health at all, and it will negatively impact producers and it will impact society as a whole. Because when you're improving feed efficiency, what it means is that you're using less feed to produce the same amount of meat. So it's resource efficiency.

Now, what was your question? How long have ionophores been used? Decades.

But there was another question that I thought I'd have a go at.

Mrs. Tilly O'Neill-Gordon: How do they help the industry?

Dr. Reynold Bergen: How do they help the industry? I'll speak to the ionophores.

There are really the two points that have been brought up, and one is that if we keep animals healthier by using drugs like ionophores, we're using drugs that are of zero importance or very low importance in human medicine. If we can use those tools to keep animals from getting sick to begin with, that means fewer animals get sick, fewer animals get really sick, and fewer animals get really, really sick, which means we don't need to use the high-powered drugs to fix them. That's one benefit to the industry.

The other benefit is in terms of the growth promotion and feed efficiency. It allows us to use our feed resources more efficiently. We can get more pounds of beef out of the same clump of hay and grain than we could without using it. In terms of the ionophores, there is a health benefit there in terms of preventing coccidiosis, which is a good disease issue for cattle and all livestock, I believe.

But then one of the real interesting ones with the ionophores—I hope I don't get too nerdy here—is that the way these things work is they promote the growth of bacteria that produce a molecule called propionate, which is used more efficiently in the animal's metabolism. So I'm not going to go any further into that.

One of the classes of bacteria that the ionophores inhibit is a group called methanogens, which is really interesting, because they're the ones that produce methane. So by feeding ionophores, we are improving feed efficiency. We're having absolutely zero impact on human health and there's actually the side environmental benefit in terms of greenhouse gas, in addition to the fact that we're using fewer resources to produce beef.

● (1700)

The Acting Chair (Mr. Tim Uppal): Mr. Smith, you have about 30 seconds.

Mr. Rick Smith: I'll be brief. Just to point out the obvious, the implication of my industry colleague's comments is that the situation is terribly complicated but that largely it's working.

I would just point out ways in which it's clearly not working. The first is simple transparency. If none of this is a problem, then why isn't the amount of antibiotic used in the livestock industry in Canada clearly available to the Canadian public? It is not, at the moment.

Second, if the situation is working, then how do you explain the situation of specific drugs, such as ceftiofur, which is administered willy-nilly to chicken eggs, which is important to human moms and kids? We have a study from Quebec showing a very tight correlation between ceftiofur use and bacterial resistance in people—not in food but in people.

The Acting Chair (Mr. Tim Uppal): Thank you very much.

We'll go to Dr. Dhalla.

Ms. Ruby Dhalla (Brampton—Springdale, Lib.): Thank you very much.

This is kind of topical and timely in terms of our discussion of it, because since that CBC documentary, our office has actually been flooded with a number of e-mails from concerned Canadians and constituents.

I know that when Mr. Dungate started off his presentation, he wanted to talk about the elephant in the room that no one wanted to discuss, but I can tell you that people are alarmed. They are horrified, to an extent, and they are scared.

I have a science background, but someone who doesn't have the background, which is probably the average Canadian who is going out to the grocery store and buying chicken, really wouldn't know who to believe. When they watch a documentary the CBC puts on, let me tell you, they are alarmed and they are concerned.

We not only have the report done by the CBC. There was a report written in the *Canadian Medical Association Journal* in 2009. We had the Auditor General in Ontario in December 2008, I believe. We had a director of procurement at Maple Leaf Foods. Each and every one of those individuals, or those particular media, have raised the issue of the use of antibiotics in chickens and its correlation with human health.

I find it ironic that Dr. Bergen was talking about the fact that there's no correlation, when I believe that Dr. Smith stated that in the studies that have been done they have found a direct correlation between cephalosporin used in chickens and its impact on human health.

I know that Dr. Rosengren was speaking about the fact that there are protocols between veterinarians and the producers in terms of the industry. But you also mentioned in the beginning part of your presentation that there are over-the-counter drugs.

Who's monitoring what is being used over the counter by these producers?

Dr. Leigh Rosengren: It would be CIPARS. They've had problems securing long-term funding to monitor it in every commodity, but CIPARS would be the appropriate government arm that would be responsible for that.

Ms. Ruby Dhalla: Regardless of resources, is there a tracking system in place?

If you have an individual out there right now who goes to Shoppers Drug Mart and wants to buy 50 bottles of Advil, because it's available over the counter, no one is going to be able to monitor that. If the person goes to the family doctor and is actually prescribed a certain set of medications, the doctor is going to be able to look at his or her chart.

Who's monitoring how much usage of these over-the-counter products is occurring?

Dr. Leigh Rosengren: You have hit the nail on the head. You have it exactly right. In Canada, because we have many veterinary drugs that are OTC, or over-the-counter, the only way to get accurate drug use information is to go directly to the farm. We can't do it at a pharmacy level. We can't do it at any level other than by going on-farm, which is why the CIPARS program has been designed as such.

Ms. Ruby Dhalla: From my study and research of it, which is not going to be as extensive as your knowledge and wisdom, the Canadian Food Inspection Agency doesn't share its data with CIPARS. Is that correct?

You have the Canadian Food Inspection Agency, which is monitoring the amount of antibiotics being used in the chickens, which is not providing that information to a body that is also supposed to be helping and which I believe you, as the Chicken Farmers of Canada, are working with.

● (1705)

Dr. Leigh Rosengren: Those are two separate issues. The antibiotics are reported on the flock sheet. I presume that this is what you're referring to. Those flock sheets are designed to collect information so as to avoid residues in Canadian meat.

There's a very distinct difference between residues and resistance. Most of the Canadian regulation is in place to avoid residues.

The CFIA information is used on a per-case basis to ensure that Canadian meat is safe and avoids residues. That information, you're right, is not passed on to CIPARS, because it's collecting for a separate perspective; it wouldn't be useful for tabulating resistance.

Ms. Ruby Dhalla: When you use the words "judicious use", to me that would mean in a therapeutic sense and not in a preventative manner. I think that needs to be defined.

To Dr. Hansen, Dr. Smith, and perhaps to the Chicken Farmers of Canada, could you provide a recommendation? I think what you have told us here today actually creates more worry. We need to do something. Someone needs to get on top of this. From the studies I have read and the information we have seen, the amount of antibiotic use going on with chickens is alarming.

What recommendations would you have for this committee?

The Acting Chair (Mr. Tim Uppal): I think you'll have to get those in writing. Your time is up.

I'm going to move on to Mr. Brown.

Mr. Patrick Brown (Barrie, CPC): Thank you, Mr. Chairman.

One of the challenges with this format is that we get to ask you questions and sometimes at the end of the round make comments. I'm sure you'd love to add your two cents in.

In one of the previous rounds, Mr. Smith said he had two questions that he thought were not being answered. One was about antibiotics and why the levels weren't disclosed. Another was about ceftiofur. Maybe you could respond to that. It would be interesting to hear your take on his concerns.

Mr. Mike Dungate: With respect to ceftiofur, it is not used willy-nilly. Ceftiofur is used in ova to prevent a sickness in day-old chicks that come from a susceptible breeder flock. It's not used across the country. It's not used all the time. It is used when there is a specific issue. It's used once in the egg, and that's it. It is not in the feed. Let's be clear when we're talking about something like ceftiofur. It's important how it's used. I appreciate the opportunity there.

As for disclosing levels, we report to CFIA all the antibiotic usage that is put on a flock.

The other thing that comes out, in reference Ms. Dhalla's question, is that there is a small percentage of use in chickens that is not done by a veterinarian. If you have a flock issue and it goes through a flock, you're going to use a whole flock. You're going to put trust in a veterinarian to figure out what you need to do, because we have six weeks to market in a chicken flock. We don't have time to test one out, see if it works, go back to the drug store, see if Advil works better than Tylenol. We're going to go to the vet, and the vet is going to prescribe. That's how it gets done. The percentage of over-the-counter in our industry is small.

Mr. Patrick Brown: How do you feel the regulation of your industry compares with that of other countries? I've heard some reference to the U.S. and EU. Is it your sense that the regulations are comparable, or do you feel that there is less regulation here?

Mr. Mike Dungate: I think we have good strong regulations on farming in this country. One of the issues regulation-wise is the availability of alternatives. We've heard "Just stop doing it, and do that". Some countries have approvals in for vaccines or other alternatives. If we don't have any of those, we're just going to cause a disaster if we say "Stop using it, and that's it". That's not going to lead, as Dr. Bergen said, to improvements in human health.

We need to be smart in how we address this. We need to move away and reduce. You have chicken farmers in Canada whose policy is to find the best way to reduce the use of those antibiotics that are of significant medical importance to humans.

● (1710)

Mr. Patrick Brown: Mr. Smith, how come that level of disclosure isn't adequate? Did you have the interpretation that ceftiofur was being used in feed? What was your understanding?

Mr. Rick Smith: I'm quite sure I never said ceftiofur was given to adult birds. It is used in a widespread basis on eggs that don't show any particular sign of being ill. So it is used in a widespread way. It is a drug important for human use, so I don't understand how the chicken farmers can have their cake and eat it too.

On the one hand, they're saying they're being responsible and they're trying to steer away from drugs that are important to human medicine. On the other hand, they're admitting that they use this particular drug that's important for human medicine, for kids, in a widespread way on eggs that are not sick. So it's one or the other.

I just heard Mr. Dungate admit in response to Ms. Dhalla's question that nobody really does have a handle on over-the-counter antibiotics. So we cannot in Canada produce the kinds of statistics that Dr. Hansen and I have quoted from the United States and Australia. We don't know in Canada. We can't say whether 75% of antibiotics, excluding ionophores, are used on animals. We just don't have those numbers in Canada. That's a problem.

The Acting Chair (Mr. Tim Uppal): Thank you very much.

Ms. Leslie.

Ms. Megan Leslie: Thank you, Mr. Chair.

We heard from Mr. Dungate some ideas about cement floors and making sure that a barn is cleaned entirely before a new flock comes in.

Then, Ms. Hansen, you were saying that Denmark has found other ways to ensure healthy livestock and promote production, and I'm assuming they are ways like Mr. Dungate has proposed. Can you share with us how Denmark has been able to promote production and ensure healthy livestock? And how is it different from our using antibiotics, it seems, as the first line of defence?

Dr. Gail Hansen: What I know more about is the pork industry, because that's what I really spent some time on. They wean their pigs a little bit later than they tend to here. They use the probiotics. They use what are called organic acids, so the proprionic acid, which seems to work as well as the antibiotics for promoting growth in their hogs.

Even though there are very industrialized methods of growing hogs, they don't have the hogs quite as densely populated as is common on this continent.

I'd also point out that there's been a lot of talk about ionophores today, but the realities are there is penicillin, there are tetracyclines and macrolides—tylosin, which is similar to erythromycin—that are also used non-therapeutically and for growth promotion in livestock.

Ms. Megan Leslie: Thank you.

You touched on production, and I actually wanted to ask Mr. Prescott a question about size of production and how that correlates to the need to use antibiotics. Do you have information to share with us about that?

Dr. John Prescott: On the relationship between the size of animal production and the use of antimicrobials, no, I don't have any comment. I don't think there's any relationship to the size of production. I think a lot of it relates to regulation, not the larger the herd the more antibiotics you use. I don't think that's connected.

Ms. Megan Leslie: Did you have a different opinion?

Dr. Gail Hansen: I can't speak for Canada, obviously, but I know in the United States the U.S. Department of Agriculture did a study and they did find that, for the most part, the larger the farm, the more likely they were to use antibiotics for non-therapeutic purposes. That may be different in the United States from what it is in Canada. I don't know.

Ms. Megan Leslie: And it may be just practices, not necessarily that if it's larger they need to use....

Dr. John Prescott: I think there would be huge management differences with different farms.

Ms. Megan Leslie: Right. Sure.

Mr. Smith, I know that novel antibiotic creation is really in a slump. We're just not making new antibiotics and we hear about the dangers of antibiotic resistance. What do you know about the rate of antimicrobial resistance compared to the rate of new antibiotics being created?

● (1715)

Mr. Rick Smith: It's an interesting question, and I'm not sure. I'm a scientist, so I'm trying to imagine how you'd graph those two things.

But certainly you're right. The creation of new antibiotics is a very difficult enterprise, there's no question. The World Health Organization, the Canadian Medical Association, the American Medical Association, and any doctors group you want to talk to are extremely concerned about the rapid general increase in antibiotic resistance.

I'm delighted that the health committee is hearing this issue—examining and considering it—because first and foremost this is a public health issue. Yes, it's about livestock production, but first and foremost this is a public health issue. Other jurisdictions are showing the way in terms of protecting public health.

I have a 2009 document from the Danish government with very strong conclusions. Because of the Danish and EU policies, total antibiotic consumption in food-producing animals has been reduced by 50%—in excess of 50%—since the early 1990s. Animal health has not been compromised. Agricultural productivity has continued to improve. Denmark continues to be a monstrous exporter of food animals. We haven't talked about it very much here, but consumer prices have not been affected.

Again, if there's the possibility that the Government of Canada can do better in this area, can make some contribution to bringing down rates of antimicrobial resistance.... The Danish and the EU examples have shown that it's no big deal, frankly, for livestock producers. Why wouldn't we do it?

The Acting Chair (Mr. Tim Uppal): Thank you very much, Mr. Smith.

Mr. Stanton.

Ms. Megan Leslie: Mr. Chair, before we go on, I have one very small point of order.

It's unfortunate that the Public Health Agency and Health Canada aren't here. I know we'll talk about this at another time, but I just want to say on the record now that I really think we need to have them here to actually find out what's happening at the federal level.

Thanks.

The Acting Chair (Mr. Tim Uppal): Thank you.

Mr. Stanton.

Mr. Bruce Stanton (Simcoe North, CPC): Thank you, Mr. Chair.

Great topic today, and thank you for your presentations.

I don't pretend to be an expert, certainly, on the science or medicine side of things, so I tried to follow along as best I could.

Ms. Szkotnicki, the presentation you handed out here today is quite illuminating. I just want to go over a couple of things so the committee understands. There have been a lot of comments made that I think might lead our viewers to be considerably alarmed, and perhaps not for the right reasons.

You made a distinction between the types of antibiotics in use in the veterinary realm. Mr. Dungate and some of the representatives of industry made reference to those used for therapeutic treatment. Are those the types used when bacterial infections require this kind of intervention? Is it this type of antibiotic use that might pose a potential risk to human antimicrobial resistance?

We've heard here today that the use of the therapeutic type, the stronger type, is limited. Yet we've heard, and there seems to be evidence, that somehow this is increasing microbial resistance in humans. So I'm trying to isolate the source. You say here that none of these pose any kind of risk to human health, so I wonder if you could help us there.

Ms. Jean Szkotnicki: I'll just qualify your ending statement. Everything poses a risk, but the question becomes can we manage the risk? There's lots of effort put into managing the risk.

On your other question, about use of antimicrobials and the impact on resistance—I think that's what it boils down to—the different uses are treatment, prevention, control, and growth promotion. Across any of those applications, the use of any microbials—and I'll eliminate the ionophores from that equation—have the potential to create resistance. The question is, how do we manage that situation?

We manage it through different methods. There is the labelling of the product. We go through the review process. I talked about that as a control. Also is the fact that a lot of the newer products critically important to humans are prescription-only, under veterinary prescription. There has to be a veterinary client-patient relationship. There are prudent-use guidelines that they're following. We also have the producer groups with quality assurance programs that look at maintaining the quality of the product at the farm level right through to the table.

● (1720)

Mr. Bruce Stanton: So there's a very rigorous regime in place to essentially make sure you're doing all the best you can to prevent bacterial infection in the animals, because that's a potential risk to human health as well. This all is going into the food chain; you have to prevent it at the front end.

When it's all said and done, one of the things that hasn't come up here today is that most of us don't eat raw chicken—I mean, we cook the stuff—and I think it's widely known that one cooks poultry products to medium doneness. When you follow these normal protocols, does this all become really a moot point? Does cooking the product indeed essentially eliminate any possibility that this is going to result in any kind of diminishment of human health vis-à-vis antimicrobial resistance?

Ms. Jean Szkotnicki: Cooking is probably the best risk management tool at our hands to eliminate the concerns about bacteria, whether they be resistant or non-resistant. With the food level, I think that's one of the simplest risk management tools.

The Acting Chair (Mr. Tim Uppal): Thank you very much.

Members, I'm going to ask you to stay. We're going to have to do a little bit of committee business.

Thank you, witnesses, for coming and contributing to our study on antibiotics in livestock. We will be going in camera right away to discuss a little bit of committee business, so I have to ask you to leave the room as soon as possible, but thank you for coming.

Members, please stay for a few minutes.

[*Proceedings continue in camera*]

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