



World Health Organization

WHO Virtual Press Conference on antimicrobial resistance

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Speaker Key:

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CL Good afternoon from the World Health Organisation. You are online now for a virtual press conference on the launch of the WHO guidelines on the use of antibiotics in food-producing animals, the first-ever WHO guidelines concerning the animal/human interface. My name is Christian Lindmeier and I'm welcoming the three guest speakers here today. First we have Dr Marc Sprenger, who is the Director at the Antimicrobial Resistance Secretariat here at WHO; Dr Kazuaki Miyagishima, Director at the Department of Food Safety, and Dr Awa Aidara-Kane, Coordinator at the Department of Food Safety, WHO, who's mainly responsible for bringing those guidelines together.

So I'm glad that you all have joined me here. We'll go of course through some presentations from everybody and then we'll take your questions. In order to ask questions please dial 01 on your keypad, otherwise you will not be seen in the queue. If you have not registered fully with name and agency we will not be able to take your questions. So in case that you have not done so or have not done the registration you would need to log out again and call back in to register in order to be able to ask questions.

00:01:26

Thank you very much and we'll start with Dr Sprenger to give us a bit of an overview on the antimicrobial resistance situation.

MS Good afternoon. Antibiotic resistance is a very serious threat to public health. It's a situation where infections become untreatable and an example is urinary tract infections, pneumonia,

gonorrhoea, tuberculosis or blood infections and in other words the antibiotics are no longer effective. Now, also cancer treatment, transplantations and other complex medical interventions all depend on effective antibiotics in order to prevent infections.

Now, there are only few promising options regarding new antimicrobials in the research pipeline so there's not much to offer. It's also important to keep in mind that the sustainable development goals are negatively impacted if AMR is not addressed. The World Bank has calculated that about 4% of its annual GDP by 2050 will be lost and an annual shortfall of more than three trillion dollars by 2030 in the high AMR impact scenario.

Now, what are the causes? I think one of the most important causes is the overuse and misuse of antibiotics in human medicine but also in animals.

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CL Thank you very much, Dr Sprenger and with this, a perfect way to go into the overview of the human/animal interface. Dr Miyagishima, please.

KM Hello to everyone. As Dr Sprenger mentioned, if we use antibiotics in a prolonged and routine way in humans that triggers and drives the emergence of antibiotic-resistant bacteria in humans. Actually the same is true for animals. In some countries approximately 80% of antibiotics used or sold on the market are actually for food animals. The rest, less than 20%, is for humans, companion animals and plant crops.

In addition the majority of antibiotics used in animals are the same as or belong to the same classes of antibiotics used in human medicine. As antibiotic resistance cuts across the boundary between humans and animals through, one, direct contact between humans and animals, two, through food, and three, through the environment, it is very important that we take actions to reduce overuse and abuse of antibiotics, not only in human medicine but also in animal production.

We need to take actions in animal production to protect finally the public health. The recommendations which WHO are issuing today are not actually new. What is new is that this time round WHO developed these guidelines as formal WHO guidelines, following stringent WHO guideline development process including systematic reviews.

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WHO did so as the matter is so important and urgent from the global health security point of view. Let me quickly outline the full recommendations that are contained in the WHO guidelines. Behind each of the recommendations there is a good body of evidence to justify these recommendations. Recommendation one; reduce the overall use of antibiotics in animal husbandry; that is recommendation one.

Recommendation two; completely restrict - in other words ban - the use of antibiotics as growth promoters in animal husbandry. This is recommendation number two.

Recommendation three; also say that we should not use antibiotics as a preventive factors in the absence of the disease of animals. Of course we allow for some flexibility to use maybe preventive use of antibiotics under very well defined conditions under the oversight of a qualified veterinarian but in principle we recommend against using antibiotics for preventive purposes. That is recommendation three.

Recommendation four refers to the cases where an animal contracted a disease so we need to treat the diseased animal or to block the spread of the disease or infectious disease from the one diseased animal to yet healthy animals.

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In this case we think that it is justified to use antibiotics but we should not go to the top-class or super antibiotics right from the beginning. We recommend that veterinarians take samples from diseased animals, make a testing and we will find out which antibiotics are actually effective and we should try to use the antibiotic which is least important to human medicines and consider gradually the upper categories' antibiotics. So these are four recommendations we are issuing today.

WHO is fully aware of the impact of these guidelines that may happen beyond the public health sector. These impacts may be positive or negative. WHO however considers that the need to preserve antimicrobials or antibiotics for human medicine by far outweighs possible impacts in some other sectors. We should look at the examples of countries which have successfully phased out growth promoters. Public demand for foods produced without routine use of antibiotics can actually drive in the future the market and also catalyse the changes needed in the animal production systems.

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CL Thank you very much, Dr Miyagishima. Before we go to Dr Aidara-Kane to go a bit deeper into the guidelines, let me remind everyone, in order to place yourself in the queue for questions please dial 01 on your keypad. Dr Aidara-Kane, please.

AAK Thank you very much. As has been said by Dr Kazuaki, the guidelines that we are publishing today build on scientific evidence. The main systematic review has been published, is published today, available by Lancet so you can have a look at it and also in our website we have 400 pages of annexes that goes with the guideline that is published today so very strong scientific evidence backing all the recommendations that has already been stated by Dr Miyagishima.

In addition to these recommendations, science-based, we have what we call best practice statement so unlike the recommendations these are based on the expert opinion and also on literature review but no systematic review to back them. So you would understand that these best practice statements are based on - the first one is saying that any new class of antimicrobials developed for human use will be considered as critically important for human medicine unless classified otherwise by WHO. Easy to understand; we have very few antibiotics that are in the pipeline for human use so if a new drug becomes available of course we will consider it as critically important for human health unless decided otherwise by WHO.

We have another recommendation regarding medically important antimicrobial agents that are not used in animals but are now only used in human medicine so the recommendation here is that we do not want these antibiotics to be used in animals so we have two best practice statements; any new drug will be considered critically important unless otherwise decided by WHO; and the other one is that the antibiotics that are now used only in human medicine - and these are last-resort drugs like carbapenems for example - are only used in human medicine. We do not want them to be used in food-producing animals; to preserve their efficacy.

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CL Thank you very much, Dr Aidara-Kane. To remind everyone, please also think about the embargo. The embargo's set for 16:00, 4:00pm in Geneva, which is in about 45 minutes. Before we get to the first question on the line, Dr Sprenger, maybe you could briefly describe what a world without antibiotics would look like. All of us - we all grew up in a world with antibiotics, nobody can remember the times when we didn't have antibiotics so how would that look - like?

MS It's a little bit going back to the Dark Ages. You cannot treat infections - and there are a lot of bacteria around us; food infections but also a wound infection and people will just die because of these infections but also modern medicine is not possible; a hip replacement is not possible because for all these interventions you need to have antibiotics to prevent infections. So this is - has enormous impact on all of us.

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CL Thank you very much. The main role of antibiotics is not prevention, Dr Miyagishima, as you stressed. What could be used instead of antibiotics for the prevention of infections or prevention of any diseases in animals?

KM Yes, we need full collaboration with the sector which has good expertise in animal production. We need to protect animals from diseases for animals' welfare but also for the food security of the population. In order to prevent disease in animals without using antibiotics we have several means to do so. We can improve the hygiene in general in the animal production setting; we can introduce a better biosecurity so that pathogen will not reach the animal herds; and we can also improve the conditions under which animals are raised to decrease the risk of infectious diseases because we know that intensive and very crowded animal husbandry practices open the risk to the diseases.

And last but not least, where possible, vaccination of animals is recommended because this way you can give immunity to animals not to catch infectious diseases. It doesn't say that we have vaccines to all existing infectious diseases but there are vaccines.

CL Thank you very much; so good to have alternatives. This would also be important for of course also the animal producers, the food producers in the animal sector. Dr Aidara-Kane, this guideline development, the questions around antibiotics and the human/animal interface is nothing which started yesterday; this has started years ago. Could you maybe describe in a few words the process, how this went about?

00:15:09

AAK Thank you. So WHO involvement in this area of work dates back to 1997 when WHO has addressed the issue of antimicrobial use in animals and antimicrobial resistance. The first meeting in Berlin addressed the increase in resistance in salmonella and campylobacter, fluoroquinolone resistance or reduced susceptibility linked with use of quinolones in food-producing animals. And I think one important milestones of WHO work in this area is the publication in 2000 of the WHO global principles for containment of antimicrobial resistance due to antimicrobial use in animals intended for food.

And if you look at the WHO global principles you will see that many of the recommendations that we are issuing today have already been there and the good news is that these recommendations, and including the ban of antimicrobials as growth promoters, have been successfully implemented in many countries in the world and in Europe in particular and this has resulted in reduced antimicrobial

resistance in food-producing animals, reduced antimicrobial resistance in human with no effect or very little effect in food production and in food security.

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So we have good examples of successful implementation of these guidelines. Vaccination has been mentioned earlier and we have a very good example from Norway where the need for antimicrobial use has been almost reduced to zero because of vaccination, so vaccination is indeed a good way to prevent infections.

CL Thank you very much. I'll remind everybody to dial 01 in order to get put in the queue. In the meantime one other question; do we have - following up on what Dr Aidara-Kane said - do we have further examples of countries taking action against the use of antibiotics or to stop it or to slow it down? Dr Sprenger, maybe.

MS Yes. There are two other examples; one is in the Netherlands. They had a very low use of antibiotics in humans but very high in the animal sector and at a certain moment there was an agreement to reduce that and they were able to reduce that by almost 70%. That's quite impressive and had in fact only to do with good animal husbandry.

Another example is poultry industry in the United Kingdom. The Poultry Council showed that there was a decrease of 70% of the use of medically imported antibiotics and at the same time there was an increase in the production of poultry. So this was a very impressive result and it didn't cost much.

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CL Thank you very much. I'll take one question from the phone now. I have Alex Bitter, if we get that right; sorry if I misread it; and it should be ASP Global? Over to you, Alex.

AB Hi, yes, you're spot-on, Alex Bitter and I'm with the news service at S&P Global. I believe it was mentioned earlier about the importance of these guidelines for the food security of the population and, you know, how, you know, producing or limiting the use of antibiotics is important for global food security. Could one of you please elaborate on that a bit and explain? You know, obviously you've done a great job of outlining the impact that these guidelines could have for human health, for human medicine but when we look a little more at food security, I was wondering if one of you could explain how important these guidelines are for global food supply chains and related areas.

CL Dr Miyagishima maybe.

KM Thank you very much for this question, a very important question. Actually our guideline development group did look at the effects or impacts that may occur outside the public health arena and they looked at the food security element as well and we are mindful that the demand for food of animal origin like meat, like milk is rising because as the population of countries get rich they consume usually more animal food than vegetable food so there is an increasing demand for animal food which needs to be satisfied.

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So we have to look at the ways and also alternatives to antibiotics as growth promoters so that we do not lose the productivity of animal production and, as has been mentioned, there are a few

countries or more than a few countries that have been or that are implementing WHO guidelines already and they have found a way not to lose productivity but reduce the use of antibiotics. I think there should be a lot of knowledge and technology transfer between countries, especially those countries who have built experience in reducing antibiotic use and those countries who are now embarking on these challenges and WHO does not expect that the world will change overnight.

I think what is important is that for each country they make a commitment and they come up with a concrete roadmap for how to, let's say, take on board some of the recommendations with priorities attached to it and then we can take it from there. And FAO, OIE; I believe those sister organisations are more than happy to assist those countries in realising the transition.

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CL Alex, does this answer your question?

AB Yes, thank you all very much.

CL Thank you. As you stated, Dr Miyagishima, these guidelines are indeed actually an opportunity for the producers and the consumers. Could one of you maybe outline how consumers are driving the demand for food produced without antibiotics? Dr Aidara-Kane.

AAK Yes, I think that there is a demand for food made without antibiotics - or I don't like that term, without antibiotics, because we do not want to leave any one single animal in need to be untreated. I think that antibiotics are needed to treat sick animals, as we need them to treat sick people. What we don't want is to use antibiotics for growth promotion and prevention when you have other means that are available.

So consumer awareness has been raised a lot during the last years and there is a demand for meat that has been produced with responsible use of antibiotics and this market exists and it is now something that is recognised and also we have big food chain that are pioneering in demanding their suppliers to produce safer, healthier food without use of antimicrobial as growth promoters.

I think we should be proactive and also countries in transition where this demand is more expected to rise should be proactive and learn from countries that have already implemented these guidelines to go for more responsible way of using antibiotics in food-producing animals.

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CL Thank you very much, Dr Aidara-Kane, that is really important clarification. I'm now turning to a caller from Italy. It's Dino or Dina; apologies. Dino? Can you hear us? No, I hear nothing on our end here. If your line is on mute then we'll move on. Maybe in the line as you were pointing out, Dr Aidara-Kane, it's not against antibiotics, it's an important point to use antibiotics in the right and in the correct way and that leads me back to Dr Sprenger maybe to give as a final word a few points on the correct use and the useful use of antibiotics.

MS Yes. We prefer to say that it's about prudent use. I think we are now in a season where a lot of people do have a common cold or a sore throat. Now, we don't need antibiotics to treat this. These are all self-limiting so it's really important that you follow the instructions of your doctor and that you don't ask, don't demand from your doctor to get antibiotics. If you get antibiotics it's important that you don't share these. So all these things are important to really reduce also the use in human medicine and of course also being vaccinated.

CL Thank you very much. And the same prudent use, of course, goes for the animal sector, as we outlined. The caller who asked, tried to ask a question; if you still want to try again please type 01. Otherwise we're going into a round of some final comments. Dr Kazuaki Miyagishima.

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KM Thank you, Christian. I want to emphasise that WHO guidelines are scientifically sound but the implementation of these guidelines will entail certain costs so as I mentioned earlier, we do not expect that the world will change overnight and the WHO guidelines are voluntary, they are not legally binding, so we count on the goodwill of member states and other stakeholders because we are addressing these guidelines mainly to member states but also to the professionals like farmers, consumers and also veterinarians on the ground so that even in the absence of national legislation they can voluntarily implement these guidelines.

And the WHO and FAO; we are the host governments or, sorry, host agencies for the Codex Alimentarius Commission, which is an intergovernmental food standard-setting body and this body has taken a decision to update the existing guidance on the use and on the prudent use of antimicrobials in food production. So we very much hope that member states will get together in relevant Codex meetings and discuss how they can improve the existing Codex guidance on the use of antimicrobials in food production, taking into account where appropriate WHO guidance.

CL Thank you very much, and let us not forget that the consumers are actually really, really asking for it. So many people are asking for safer-produced food, healthier-produced food; the biological products market is booming so here is again a huge opportunity and many producers have jumped on it, already are going down this road. - I just see that the caller we tried to reach before is back online so I'm calling out again to Dino or Dina from Italy, and if you please introduce yourself.

00:28:10

Again, not. We seem to not be lucky with Italy today so I apologise if we can't hear you. I'm going to Dr Sprenger for some words and then we'll end with Dr Aidara-Kane.

MS Yes, maybe it's good, you know, today we focus on the guideline for the food-producing animals but this is part of the global action plan against AMR. This global action plan is a so-called one health plan. We do this together with FAO and OIE, the organisation for animal health. It has five objectives; one is to improve awareness and understanding of AMR and that's why next week we will have the antibiotic awareness week.

Second is to improve surveillance that we know what's going on. The third one is to reduce infections through sanitation, pay more attention to hand hygiene but also vaccination. The fourth is to optimise the use of medicines in humans and animals and this is in fact part of the fourth objective and the last one is to increase investment in new medicines, diagnostic tools and vaccines because it's also important that we have a future in future new antibiotics.

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CL Thank you very much, Dr Sprenger. Dr Aidara-Kane, some last comments?

AAK Yes, I think that AMR is a global threat. We have already mentioned it many times and I would like to invite all the human sector, the animal sector, the food producers to take these

guidelines as an opportunity to preserve the effectiveness of antimicrobials that are global public good and we should be working all together to preserve them.

CL Thank you very much. That's the perfect final word. I thank you all three here very much for participating in this. I thank all the listeners and callers. Let me remind you again of the embargo which ends in pretty much exactly half an hour. It's now 3:30 in Geneva and the embargo ends at 4:00 Geneva time. Please also be reminded, in a short time we will send out the sound files of this press briefing. Thank you and goodbye from Geneva.