

PUBLICATION, DOCUMENT

Animal and Environment Antimicrobial Resistance Delivery Group meeting: 12 September 2023

Summary of the meeting held on 12 September 2023.

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Present

Fraser Broadfoot (FB) **Veterinary Medicines Directorate (VMD)** - VC Sarah Carr* (SC) Vet & Farmer / **Animal Health & Welfare Framework Group Representative** - VC

Gabrielle David (GD) University of Manchester / Environmental Protection, WG - CP2

Meryl Davies (MD) Public Health Wales (PHW) - CP2

Jennifer Dow (JD) Veterinary Medicines Directorate (VMD) - CP2

Robin Howe* (RH) Public Health Wales (PHW) - VC

Dewi Hughes (DH) ARWAIN DGC - CP2

Ian Jones* (IaJ) Vet - VC

lestyn Jones (leJ) Welsh Lamb and Beef Producers Ltd (WLBP) - CP2

Peter Jones (PJ) HSS, Welsh Government - VC

Jon King (JK) Wales Veterinary Science Centre - CP2

Adriana Kiss (AK) Environmental Protection, Welsh Government - CP2

Ifan Lloyd* (IL) lechyd Da - CP2

Hywel Morgan* (HM) Organic Farmer - CP2

Richard Pizzey (RP) OCVO, Welsh Government - CP2

Gwen Rees* (GR) Aberystwyth University - CP2

Kristen Reyher (KR) University of Bristol - CP2

Andrew Singer* (AS) UK Centre for Ecology and Hydrology - CP2

Rob Smith* (RS) lechyd Da - CP2

Isobel Stanton* (IS) UK Centre for Ecology and Hydrology - CP2

Chris Teale* (CT) Animal and Plant Health Agency (APHA) - VC

Holly Tipper (HT) **UK Centre for Ecology and Hydrology** - CP2

Gavin Watkins* (GW) OCVO, Welsh Government (CHAIR) - CP2

Apologies

Thomaz Andrade (TA) Natural Resources Wales (NRW)

Matthew Avison (MA) University of Bristol

Chloe Darlington (CD) Health Protection, Welsh Government

Eleri Davies (ED) Public Health Wales (PHW)

Tamsin Dewe (TD) Veterinary Medicines Directorate (VMD)

Rachel Edwards* (RE) Farmers' Union Wales (FUW)

Aisling Glennie (AG) Veterinary Medicines Directorate (VMD)

Kitty Healey* (KH) Veterinary Medicines Directorate (VMD)

Richard Irvine (RI) OCVO, Welsh Government

Don Thomas (DT) WLBP

Eifiona Williams* (EW) Water, Flood and Coal Tips Safety, Welsh

Government

Facilitators

Sian Timms (ST) OCVO, Welsh Government
Matthew Witty (MW) OCVO, Welsh Government

1. Welcome and Introductions (Gavin Watkins)

The Chair welcomed all to the meeting, noting it has been a year since the last in person gathering. Peter Jones, Gabrielle David, Adriana Kiss, Robin Howe and Richard Pizzey introduced themselves.

2. Minutes and actions from the last meeting (June 2023) (Sian Timms)

a) Minutes

ST reminded the group that the minutes have been shared twice for reviewing. If no comments are received in the next week, they will be published online.

b) Actions

ST reviewed the actions, starting with the most recent.

Actions 69 & 70 - Consider free module and training for backyard poultry keepers.

FB reported there are some new modules online, as part of the RCVS training on backyard poultry. GW thanked FB and suggested the modules may supersede these actions.

Action: Share the new RCVS backyard poultry keepers' training modules (FB)

GW informed all that a training project is in place, which is being jointly produced by Farming Connect, NADIS and Lantra. It's aimed at farmers and delivered through their vets. This was the suggested method of delivering the backyard keepers training, but we'll wait to see what the RCVS modules offer first.

Action 64 - Water Branch Monitoring Work

DH and AK agreed to make the connection today to take forward the incomplete action, originally allocated to Thomaz Andrade.

Action 51 - Companion Animal Survey Results

ST advised the action will be kept open. GW has discussed publishing the results with survey author, Becca Roberts.

GW noted this survey contains some very interesting, possibly unique findings. We would like to publish them.

ST advised that there is a vacancy for a six-month PhD student placement in OCVO. GW and ST asked the delivery group to circulate the advert.

Action: Share the link to the PhD student placement advert with the delivery group (ST)

- KR queried if the role focuses on AMR, or is it wider than that?
- ST advised that the role would look at the next implementation plan for Wales (post 2024)
- AK noted GD had been recently appointed under the same scheme.

ACTION: Consider sharing an advert for a similar position within the **Environment Team at WG and amend it to include AMR. (AK & KR)**

Action 32 - Engage with Wales Federation of Young Farmers Clubs (YFC)

This action is still pending. ST reported a new member of staff will soon be joining the Finance and Strategy team, and it's hoped they may have capacity to pick this up.

- GW asked for thoughts on engaging with young farmers.
- GW asked if anyone has a link or contact for the YFC federation as the Delivery Group has a vacancy for a young farmer. MD recommended asking the YFC federation for a representative from their Rural Affairs Committee.
- Hywel Morgan provided contact details and suggested connecting with the Agricultural Colleges.
- GW noted this was an excellent idea. We could get AMR on the syllabus.

Action: Contact the Agricultural College to discuss further engagement with YFCs (GW)

3. ARWAIN DCG Phase Two Presentation / Update (Dewi Hughes)

GW explained for the benefit of newcomers that the main delivery of the Wales 5-year AMR Plan (part of the UK National Action Plan (NAP)) was funded initially by the Rural Development Programme, then the Rural Investment Scheme. It was awarded to the consortium ARWAIN DGC, who will be providing an update today.

DH agreed to take questions along the way, but there is time at the end to discuss anything. DH thanked GW and the Delivery Group for the invitation to present an update on what's been accomplished in just under two years.

DH advised that ARWAING DGC presented this time last year in Sophia Gardens, which was a midterm of what had been achieved. New workstreams will be introduced into an already ambitious programme, which is being redeveloped and restructured from September 2023. Feedback on how the workstreams will fit in is welcome.

ARWAIN DGC is fortunate to have highly trained staff, including vets, academics, and industry representatives.

DH spoke to the Phase Two presentation. After the video (slide 8) was shown, DH handed over to GR to continue.

GR introduced herself, explaining that she has been leading the Veterinary Prescribing Champions network. GR continued with the presentation from slide 10 – and spoke about some of the workstreams that involve VPCs over the next

18 months, including the group's desire to expand.

Referring to Equine AMR (slide 15), DH noted that the conversation ARWAIN DGC is having with Equine owners is very different to livestock owners, and using the clinics has been a good way of starting that conversation.

leJ took over presenting the update, starting with a brief introduction about himself and WLBP's remit, before continuing with the AMU Calculator (slide 16 onwards).

- GW queried the average mg per kg figures (slide 18), and asked FB to explain how each of the three sectors (Beef, Dairy, Sheep) is calculated in a different way.
- IS advised that we should be taking into account the assumed weights of animals, so weights should be as comparable as possible without the data.
- FB agreed that standardised weights are used, rather than actual weights.
 There is a slight difference in how Dairy and Beef is calculated. The weight used in the Dairy metric is the average weight at time of treatment. The Beef metric uses a lot more animals, which results in a lower mg figure.
- GW queried the 2021/22 averages comparison (slide 23) and asked how it compares to the UK grand total of AB usage that was published in the Veterinary Antimicrobial Resistance and Sales Surveillance (VARSS) report?
- leJ advised if you look at the comparisons of the National Target Task Force

 these figures are significantly lower (21.5 Dairy and 10 or 12 for Beef and Sheep).
 leJ acknowledged that farmers query the figures.
 It was recommended to treat them as a baseline for now.
- FB added, with regards to the VARSS report, we published the overall food producing animal mg per kg, the recent being 28.3. This incorporates all food producing animals, such as pigs and poultry. We have not recently published any Cattle or Sheep figures at a UK level but hope to do so through the Medicine Hub, once we've seen this year's VARSS report.

- HM queried if leJ had seen any connection between weather patterns and AB usage?
- leJ advised that climate / AB usage data isn't currently collected. We'd need to add something to the platform for vets to input that information.
- KR advised that we don't look at weather patterns but would model it against seasons – the seasonality to resistance in the environment, but we're still working on the models of that usage.
- AK gueried if there is a connection between seasonality and usage?
- MD added that it would make sense that AB usage is seasonal as with humans, respiratory tract infections (RTIs) peak in the winter season and UTI's in the summer for humans, the expectation in animals would be that RTIs would be higher in the winter on housing whereas Mastitis would be higher in the summer months.
- KR advised it's simplistic to say AB usage is driven by season.

GW advised that the database that leJ has been describing, can be used to answer all sorts of questions. There are opportunities to analyse this data and have a better understanding of diseases driving AB usage.

DH thanked leJ for his section of the presentation, and KR took over for AMR surveillance: Study design (slide 26). KR introduced herself, speaking about the need to design an AMR survey and building in surveillance.

- Regarding Genomic epidemiology (slide 29) GW asked if E.coli in people are being shed on premises.
- KR confirmed there is some work across Europe of looking at Poultry and Pig farmers, who may exhibit more resistance. It's possible to do but there are ethical considerations – our labs are not allowed to work with human pathogens.
- GW asked if this is something we should be doing?
- KR queried what we would like to do with that information? For example asking if farmers had more shared resistance with their cattle, and less

critically important resistance, are they less likely to get UTIs that will be resistant to last line antibiotics? Is being a farmer a protective factor, or is it the environment?

- Referring to reduction of Antimicrobials (slide 31) DH noted that there seems to be a corresponding drop in resistance in line with the reduced use of antibiotics.
- IL spoke about situations with farms very close to each other having very different levels of AB usage. Regarding a farm with very low AB usage, there was a concern that animal welfare may be suffering – but this was not the case.
- GW queried the fairly high levels of resistance to category C's and D's for E.coli, and asked from the data that has been gathered, can it be teased apart how much of this was due to AB usage on the farm, and how much is evolutionary resistance?
- KR advised it is known globally that there's a correlation between usage and resistance, but it's more complicated. The data is very recent, and the question is – was it usage in the earlier 20th century that led to resistance around the farm today?

DH thanked KR for the update, noting how it's crucial to take what we've learnt to our audiences, and continued with the presentation (from slide 33).

The meeting broke for lunch at 12:00 for 45 minutes, and the ARWAIN DGC presentation would be resumed before Item 4.

JK introduced himself and spoke about Syndromic Surveillance (from slide 45). Following this, IL introduced himself and presented an update on the Biosecurity App (from slide 50).

Concluding the update, DH reminded all about the different phases of ARWAIN DGC's work. The first programme, leading up to September 2023 will be

initiating, testing, and piloting workstreams and technology. The second programme will further develop the workstreams, but crucially measure the impact and outcomes.

- Hywel Morgan suggested fencing off common land to contain cattle.
- IL recalled a conversation from around 15 years ago about this matter in the Gower area, concerning controlling TB, but cattle grids were installed instead. However, the use of invisible boundaries (virtual fencing) has been quite successful on a small scale in the area, and may help mitigate the risk of unknown herds mixing on open grounds; but this is a different challenge.

DH welcomed everyone's views on how ARWAIN DGC can work more closely with stakeholders, Public Health Wales for example.

GW agreed, noting that MD made that point last year. When we're talking about things like AB usage at events (Royal Welsh Show for example) we should have a combined One Health comms approach with PHW.

MD added that the next National Action Plan contains a lot more on public engagement, such as messaging on safe disposal.

- KR queried if there are opportunities to share data on resistance patterns or regional overlaps?
- MD clarified; would this resistance data need to be geographic?
- KR confirmed this would be the case.
- RH suggested that we just need a conversation about what data is required. Some – such as PHW's **Urinary Coliforms resistance data** - is freely available online, and can be sorted geographically down to the post code. We have all AB tests done in human medicine since 2000.

ACTION: Discuss the questions that need to be put to PHW to obtain resistance data. (DH & RH)

DH requested FB's views.

- FB was interested to see the guidelines and asked if they will they be published online/available to vet practices outside of Wales?
- GR advised that access is presently limited to VPC vets, but it's a discussion to have. We need to decide how much information can be shared.

FB thanked GR and noted the data coming out of Wales on AB use is great. We plan to integrate some of the UK level data into the Medicine Hub. The next VAARS report is due 01/11/23, to coincide with the Responsible use of Medicines in Agriculture Alliance (RUMA) conference.

Regarding Syndromic Surveillance, GW asked if the Biosecurity scores correlated with AB usage, we could show farmers with good Biosecurity have lower AB usage. DH agreed, and advised a proof-of-concept farm is being used to measure this data.

JK advised that with the Liverpool system SAVSNET (Small Animal Veterinary Surveillance Network), we did get some antibacterial data, so could tell which syndromes were more likely to have an AB prescribed than not.

- leJ asked, from a Sustainable Farming Scheme (SFS) perspective, how do we acknowledge people who are complying and doing things well?
- DH responded, advising that at ARWAIN DGC's Team Meeting yesterday (11/09) there was a presentation from a farmer who detailed how AB usage had been reduced through more effective biosecurity.

GW thanked DH and the ARWAIN DGC speakers for their time. We have a lot to build on in the next few years, and this is a very exciting period.

4. Afternoon Session – Next 5-Year Action Plans

a) Animals (Jennifer Dow)

JD explained that she is the Cross-DEFRA AMR NAP co-ordinator, and very much involved in the development of the new NAP. JD spoke to her presentation.

An AMR forum is being proposed, which will be an annual gathering of Government, Academics, Farmers, Healthcare Professionals and Vets. There is no lead on this yet.

- DH asked what would working with Vets and Farmers look like in practical terms?
- FB we currently work with both through different groups Cattle and Sheep Antibiotic Guardian Groups and the Pig Health & Welfare Council – to drive change. There will be a new set of RUMA developed sector targets from end of 2024.
- leJ asked what does supporting look like how does this equate to people doing things on the ground?
- JD advised that support will depend on the forthcoming spending review. FB mentioned that there are other schemes that can offer support and get vets onto farms.

A discussion took place regarding finances for the next NAP. With no more questions, GW thanked JD for the update.

b) Humans (Robin Howe)

RH noted that the real challenge is the difference in the arrangements between the devolution of human health and how the NAP is being developed. We're

struggling to maintain levels of engagement with the groups we work with due to lack of resources.

We continue to produce reports on both AB usage and resistance. The quality of data for secondary care usage data has been impacted by the migration to a new pharmacy stock control system.

LLYGAD (Llyfrgell Data Gwrthfiotegau Cymru / Antibiotic Data Library for Wales) now contains primary, secondary and resistance data. RH spoke to his presentation.

- KR queried the format of the primary care guidance, how it was managed, and requested further contacts to discuss this further.
- RH advised that he is Chair of the All-Wales Antimicrobial Guidance Group, led from within PHW, which writes the guidance. This is done in collaboration with colleagues across the Health Boards. That guidance is then ratified by the All-Wales Medicine Strategy Group and published on the website of the All-Wales Therapeutics and Toxicology centre. MD is part of an Antimicrobial Pharmacist Group, and this may be a good place to start a conversation.
- GD explained the system in more detail, and explained how auditing of the data is built in.
- · GW asked if PHW carry out any environmental or food monitoring.
- RH advised that we have the laboratories but we're not doing any systematic antimicrobial testing. There was a plan to work with colleagues on wastewater, but funding from the NHS has been suspended.
- GW asked how much of that human resistance is being generated in a healthcare setting, and how much is entering from animal usage.
- RH advised that there have been some studies showing resistance move from the poultry to human biome, and vice versa. There is no clear messaging on transference – but it doesn't seem as marked as we initially

- thought. I am not clear what impact resistance in the veterinary world has on the outcome for animals.
- RS responded, advising that for certain conditions, vets are aware that there
 are resistance issues, so we'd avoid using certain antibiotics some
 oxytetracyclines in Sheep for example.

GW suggested taking a deep dive into the veterinary surveillance of AMR at the next meeting. There is published resistance patterns of major veterinary pathogens.

ACTION: Include Veterinary Surveillance of AMR on the next agenda (MW)

c) Environment (Adriana Kiss and Andrew Singer)

AK spoke to her presentation. MD highlighted the issue of humans improperly disposing unused medications.

d) Companion Animal Approach (Sarah Carr)

SC briefly introduced herself and spoke to her presentation, which took elements from the 5-year plan relating to companion animals.

GW thanked SC for her presentation. It gives us a good platform to build the Companion Animal component of the next 5-year plan, which is something we want to expand on.

ACTION: Members and stakeholders who have an interest in Companion Animals to organise a workshop to discuss the proposals, before the next quarterly meeting (GW)

KR advised that University of Bristol has advertised for a Lecturer to a Professor in Companion Animal in AMR. The new post holder should be in place by January 2024.

5. Round Table Updates

a) One Health Update (Peter Jones)

PJ echoed what has been said already. Wales has a voice in the development of the new NAP. Colleagues in PHW and WG are directly engaged. We're both struggling for resources, but still engaging with stakeholders. We're now establishing a One Health Oversight Group, chaired by the CVO, under the Health Protectory Advisory Group.

GW mentioned that discussions are taking place about the possible merging of the next 5-year AMR plan for Wales with One Health. JD suggested it might make more sense to have discrete individual implementation plans. GW agreed that we have to bear in mind how we slot into the bigger plan.

PJ thanked JD for her comments, and GW thanked PJ for the update.

b) VMD Update (Fraser Broadfoot)

The main issue is the Veterinary Medicine Regulations. We will soon be publishing a response on the consultation with the proposed changes. With regards to AMR, we have a new Head of Policy and Communications (Aisling Glennie) and Head of International Engagement (Clara Saville) who will be in contact.

We have the One Health report coming out, which brings together animal and human data on sales, use and resistance of antibiotics.

We are working with RUMA on the Antibiotic Amnesty Campaign, and the UKHSA on a new Antibiotic Guardian Schools Programme.

JD advised that the UK Government applied to be a member of the Quadripartite Antimicrobial Resistance Multi-Stakeholder Partnership **Platform.** We do not yet know who the UK Government will select as a representative, but we recommend Welsh Government consider signing up.

c) Environment (Adriana Kiss)

Skipped due to lack of time.

d) DG Members (All)

Skipped due to lack of time.

e) OCVO (Gavin Watkins)

Skipped due to lack of time.

6. AOB

GW thanked all who attended today. It has been a long meeting, but we are very grateful to you all for your very valuable contributions.

With no further business, the meeting finished at 15:00.

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