



Avian Expert Group and Avian Surveillance data

Zoe Treharne – APHAs Avian Expert Group Veterinary Lead



Animal &
Plant Health
Agency



Animal & Plant Health Agency

Asiantaeth Iechyd Anifeiliaid a Phlanhigion

Executive agency of DEFRA

Mission: To safeguard animal health and welfare to benefit people, the environment and the economy.



Avian Expert Group

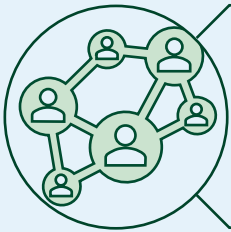
Terms of reference



Detect new and re-emerging animal related threats



Provide species-based expertise to others in APHA and DEFRA

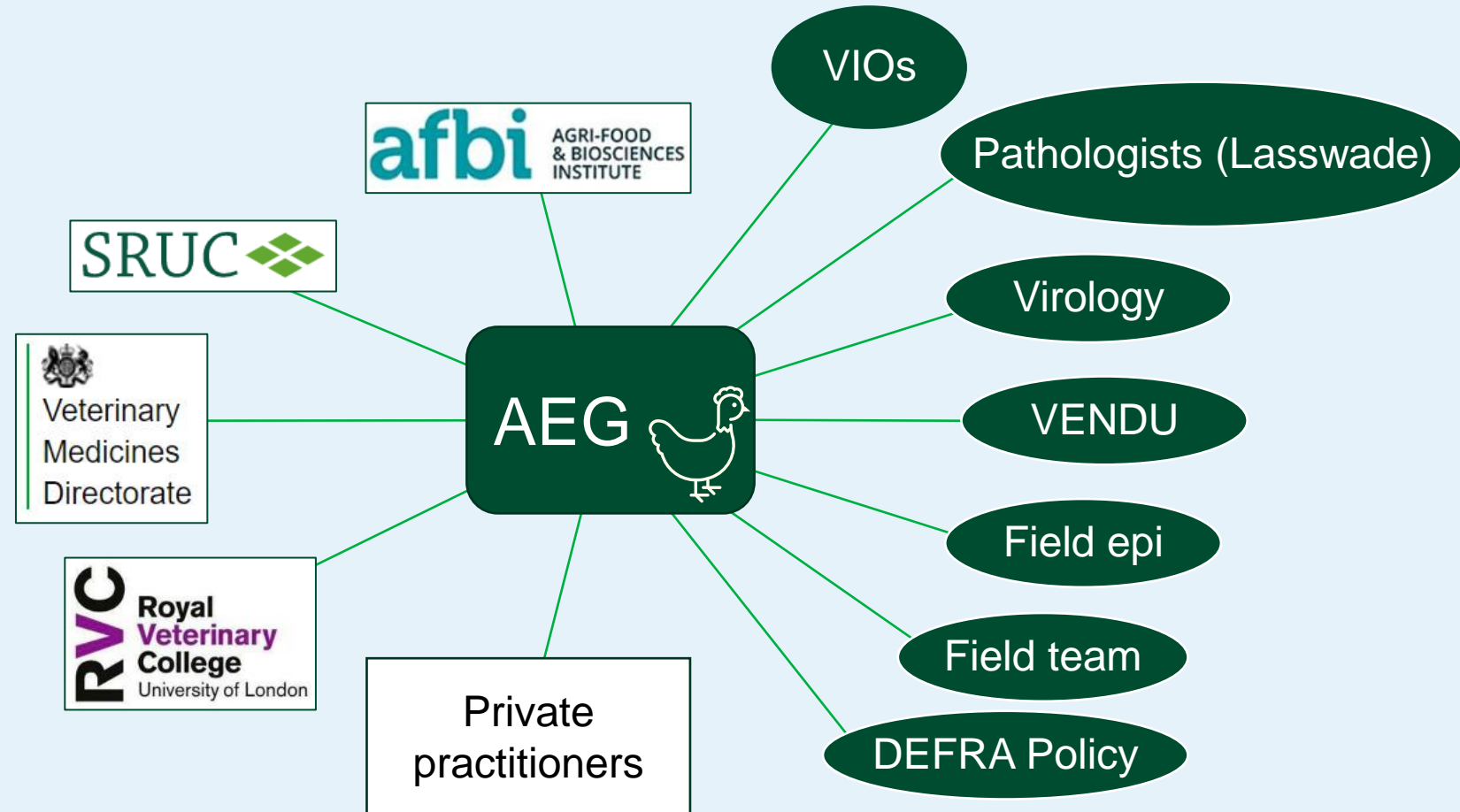


Develop surveillance and knowledge exchange networks



Maintain and develop expertise within and outside APHA

The Avian Expert Group

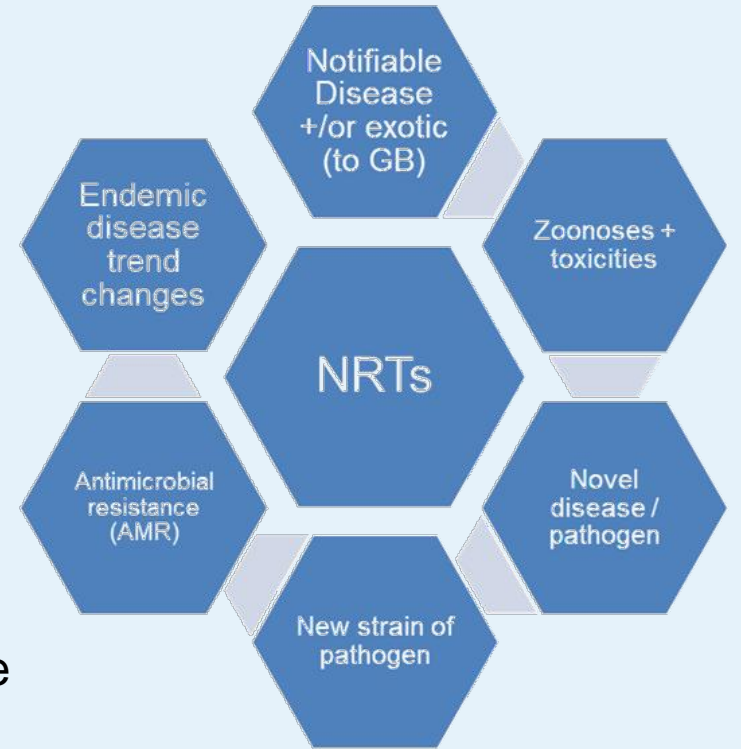


Surveillance

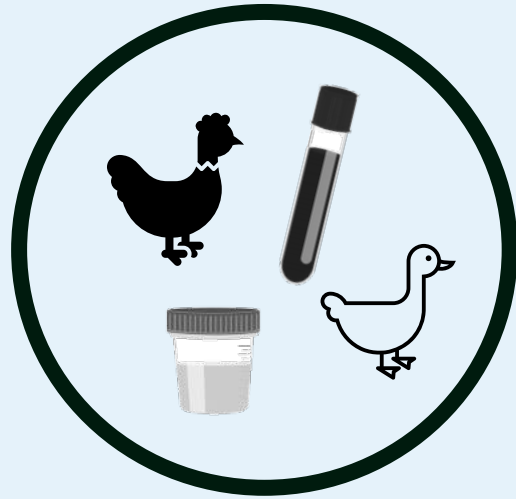


Scanning surveillance:

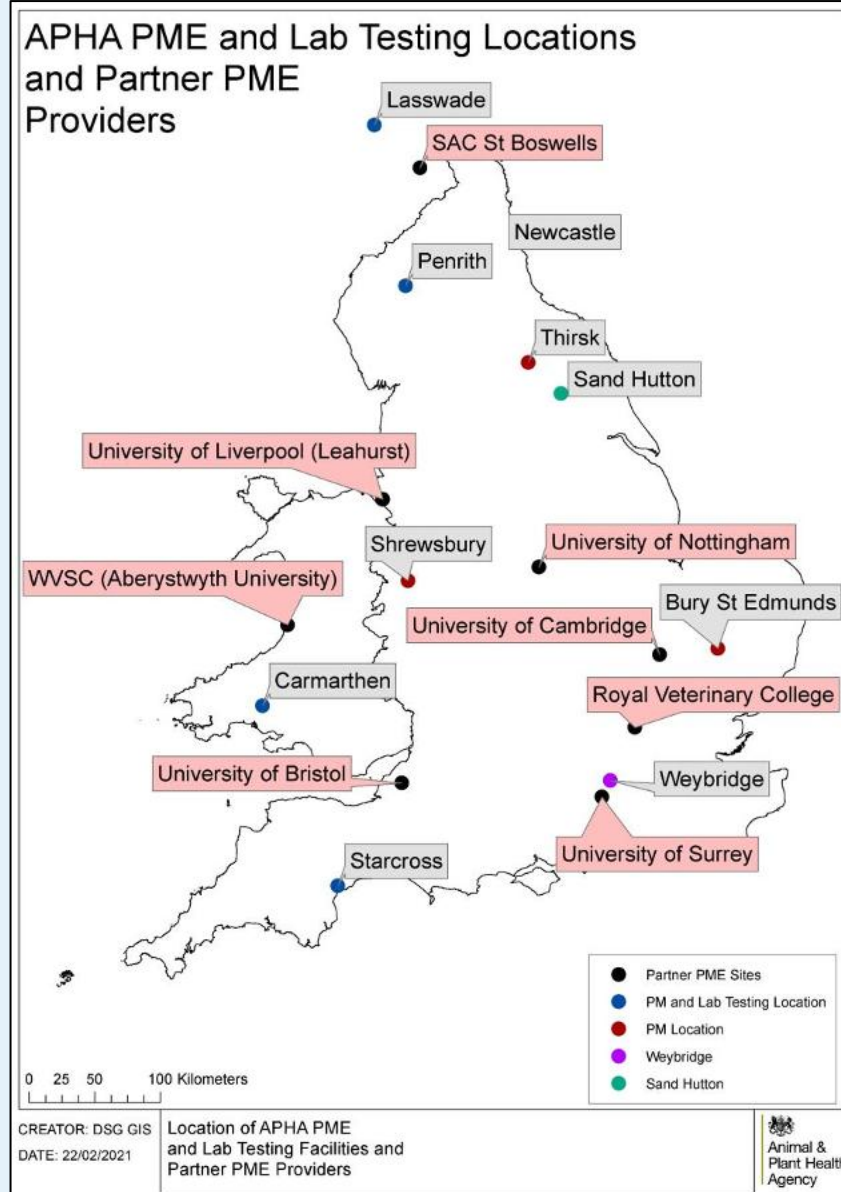
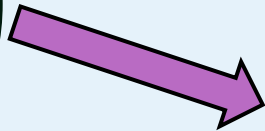
Ongoing, systematic collection, analysis, and interpretation of data, and the dissemination of that information to those who need to know to take appropriate action



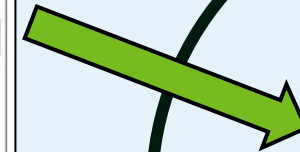
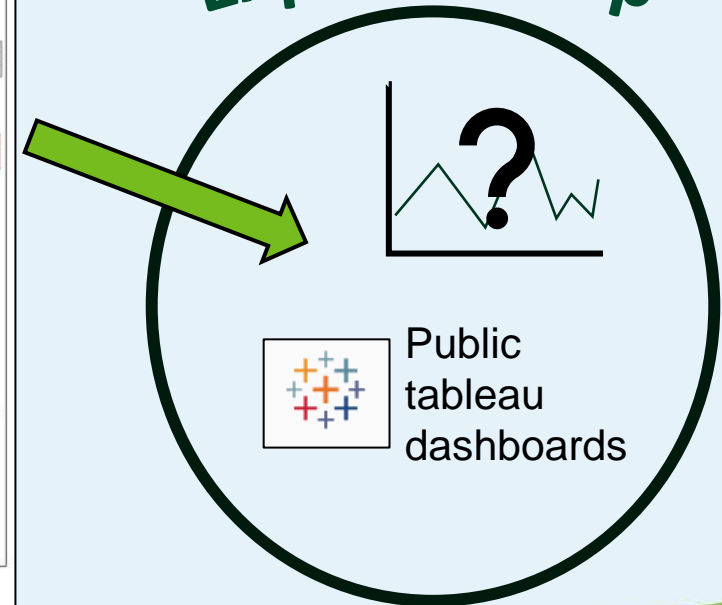
Surveillance network




Vets



Avian Expert Group



Inputs


Animal & Plant Health Agency

Reduce paper submissions by using APHA's digital Animal Disease Testing Service
<https://www.gov.uk/animal-disease-testing>

For APHA Use

Avian Submission Form for APHA VI Centres and Lasswade

Client's name and address:
Veterinary practice:
Post Code: **Clinician:**
Address where birds kept, if different from above
 Your reference:
 CPHH No:
 Post Code: **Flock code (if applicable):**

Bird Details
 Chicken Turkey Duck Goose Partridge Pheasant Other please specify:
 Breed/Strain please specify: Male Female Mixed N/A

Purpose (Please enter the main enterprise under which the affected birds are kept)
 Breeder/parent – Layers Layers Layers (rear) Pet/Backyard/Show Game (rear) Game (breed)
 Breeder/parent – Meat Broilers/Meat Wild Captive or Zoo Other (Please specify):

Type of Housing
 Organic Production? Yes No Unknown
 Controlled environment Pen/Barns Free range Commercial cages Other (Please specify):

Reason for Submission
 Are the samples from animals (or group) showing clinical signs? Yes (Diagnostic) No (Monitoring) Other
 If Other, please specify:
 Has there been any previous discussion/sample submission from this case/outbreak? Yes No If yes, see below
 Sample/carcass submitted Submission number Discussed by phone APHA farm visit

Clinical History
 Total number in flock Number in affected group Number of affected birds (incl dead)
 Age when birds placed Duration of clinical signs Number of birds died

Brief history (please append any relevant reports or photos)
Age of birds now
 If appropriate, please use this table to help describe the morbidity/mortality pattern

	Mortality	Culls
Cumulative mortality	<input type="text"/>	<input type="text"/>
Today	<input type="text"/>	<input type="text"/>
Yesterday	<input type="text"/>	<input type="text"/>
Day before	<input type="text"/>	<input type="text"/>

continuation on page 2

Clinical Signs (Mark the main clinical sign with 1 and the other clinical signs with X or consecutive numbers)


Wasting/poor condition	<input type="checkbox"/>	Recumbent	<input type="checkbox"/>	Respiratory	<input type="checkbox"/>	Egg drop	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Abnormal faeces	<input type="checkbox"/>	Lameness	<input type="checkbox"/>	Skin/Feather	<input type="checkbox"/>	Egg quality	<input type="checkbox"/>	Healthy	<input type="checkbox"/>
Upper GIT signs	<input type="checkbox"/>	Muscle/skel	<input type="checkbox"/>	Found dead	<input type="checkbox"/>	Poor hatchability	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Vent/colocal disorders	<input type="checkbox"/>	Nervous signs	<input type="checkbox"/>	Non-specific clinical signs	<input type="checkbox"/>	Other	<input type="text"/>		

Type of examination
 Post mortem examination
 Bacteriology
 Histopathology
 Mycoplasma
 Other/Project (please specify):

Bird and Sample Identification
 Date sample(s) taken or bird died

Bird/sample ID	Type and number of samples
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

For prices/Test codes (TC), please see <https://www.gov.uk/guidance/laboratory-test-price-lists>
 APHA2_avian_end (Rev. 08/20)


Animal & Plant Health Agency

Reduce paper submissions by using APHA's digital Animal Disease Testing Service
<https://www.gov.uk/animal-disease-testing>

For APHA Use

Supplementary Form

Additional clinical history:

Vaccination/Treatment
 ND @ Medicated in the last 7 days? Yes No
 IB @ Medication details
 IBD @
 Salmonella @
 Marek's @
 Other @

Flock Details
 Source of birds
 Homebred Purchased Please specify As eggs As poult/pullets As day olds
 If imported: Date Country No. of birds in batch

Husbandry
 Feeding Ad lib Restricted
 Feed type
 In feed inclusions
 Recent feed changes No Yes
 Appetite Same Increased Decreased
 Water Same Increased Decreased
 Weight gain On target Poor Uneven
 Ventilation system Natural Mechanical
 Lighting Natural Artificial (pattern and intensity)
 Type and condition of litter
 Heating (please specify)

Please tick box if samples cannot be used for anonymous surveillance or test validation purposes

DATA PROTECTION
 For information on how we handle personal data please go to www.gov.uk and search Animal and Plant Health Agency Personal Information Charter.

APHA is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Government, Welsh Government and Food Standards Agency to safeguard animal and plant health for the benefit of people, the environment and the economy.
 APHA2_avian_end (Rev. 08/20)

Inputs

Owner/Location

- Address with Postcode
- CPH

Vet details

Bird details

- Species
- Breed
- Gender

Purpose - e.g.

- Breeder/parent – layers
- Layers
- Broilers
- Game (rear)

Type of Housing

- Organic?
- Housing system
 - Free range
 - Pens/barns
 - Etc.

Reason for submission

- We only look at diagnostic data
- Links to prev submissions

Clinical history

- Total flock no
- Age when placed
- Affected group no
- Affected birds no
- Duration of CS
- Number dead
- Mortality nos

Clinical signs

- Wasting/poor condition
- Abnormal faeces
- Recumbent
- Lameness
- Etc.

Vaccination/treatment

- Medications in last 7 days

Flock details

- Bird source
- Import details

Husbandry

- Feeding/feed details
- Appetite/Water intake
- Weight gain
- Ventilation changes
- Lighting
- Litter
- Heating

Diagnosis

- VIDA code

How do we use this?

AEG



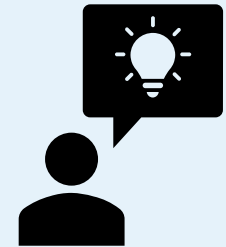
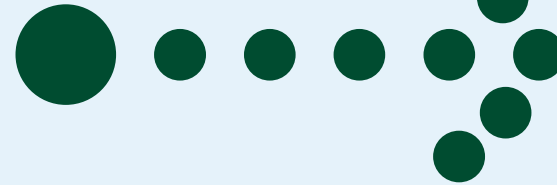
Trade



Routine scan



Data
analysis

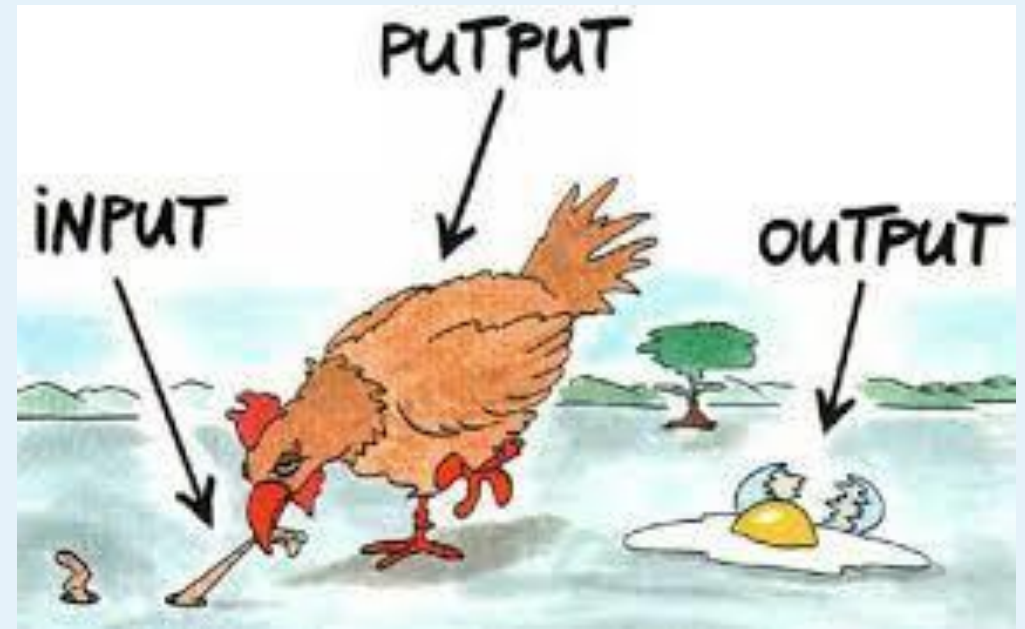


Actionable
intelligence

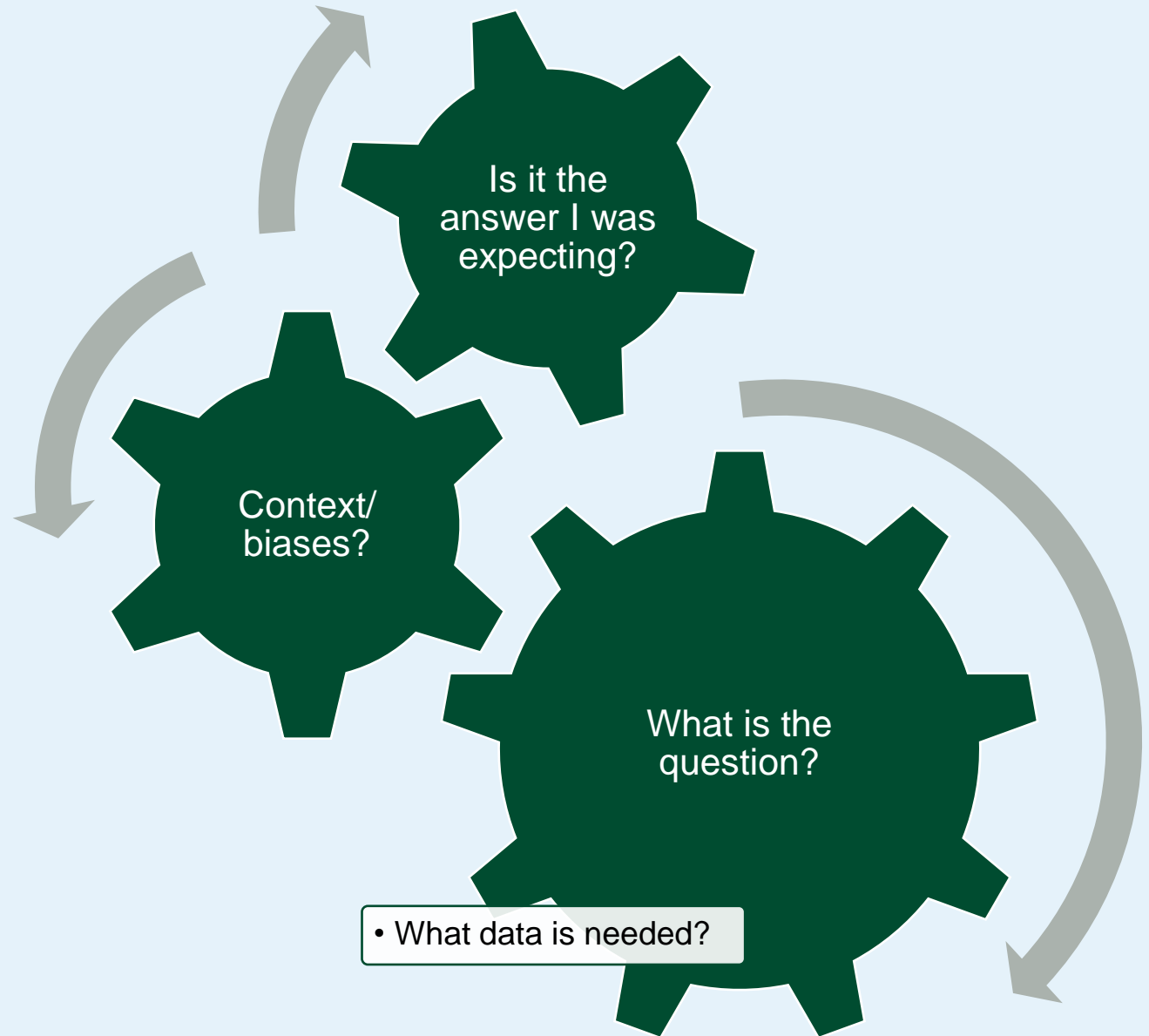
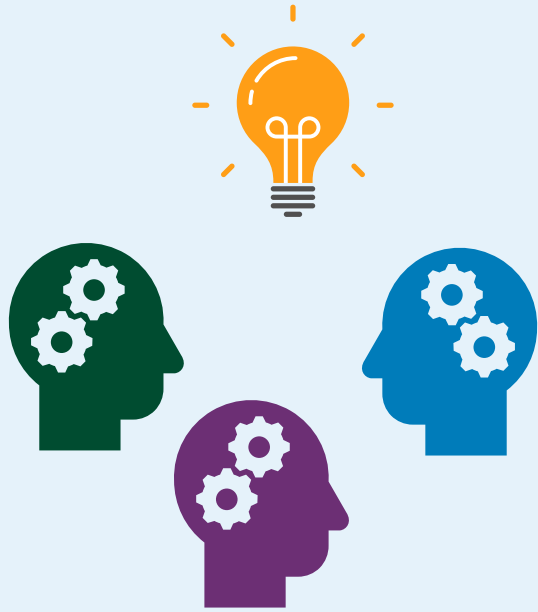
Considerations

- Input

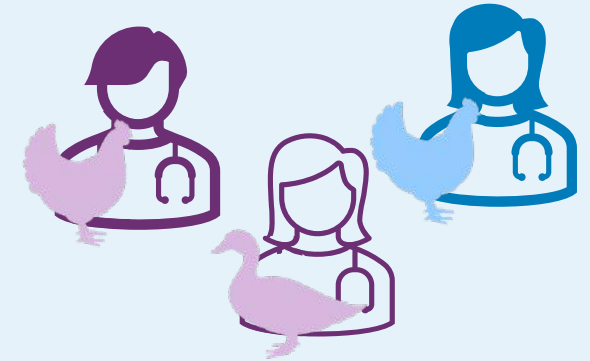
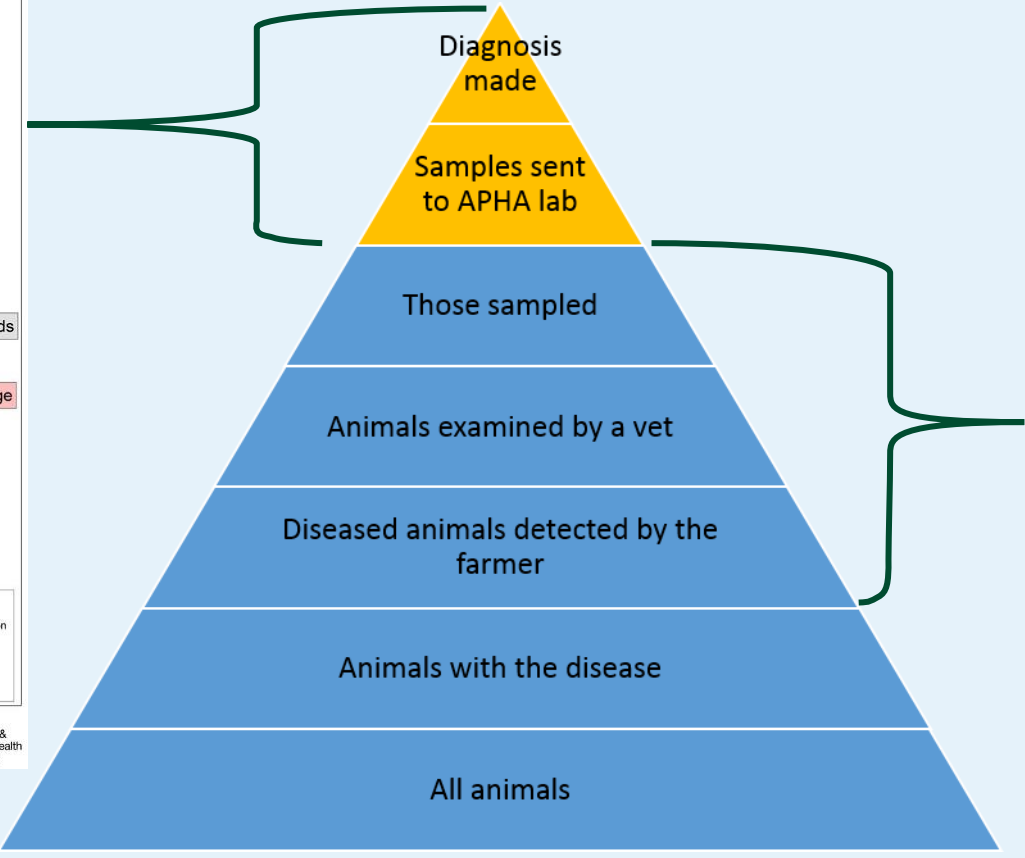
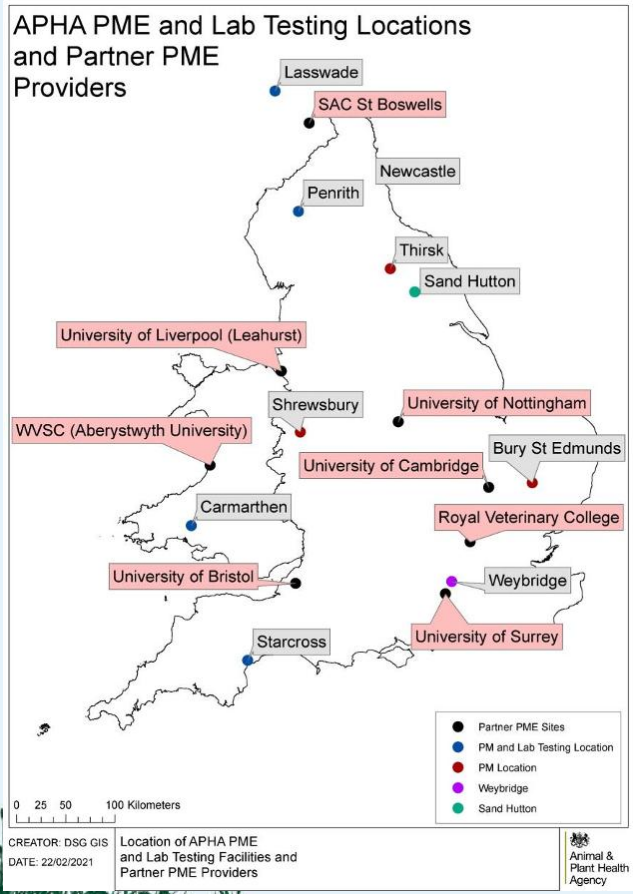
- Consistent terminology
 - Disease coding - VeNom codes
- Wrong
- Missing



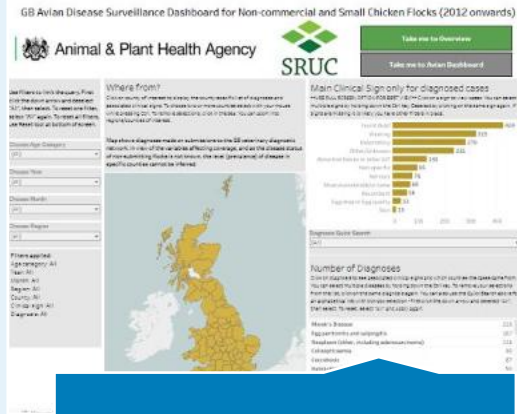
Considerations - Analysis



Surveillance Pyramid



Outputs



Small flock dashboard



Avian: GB disease surveillance and emerging threats reports



Vet record Surveillance reports



Farming press

- Country smallholder
- Farmers guardian

Endemic and Emerging Disease Alert System

The APHA's Endemic and Emerging Disease Alert System (EEDAS) for farmed livestock is a new communication tool from our scanning surveillance network.

EEDAS will be used to keep you up to date with timely animal health threats directly from our Species Expert Groups. It will complement any of the existing disease alert systems already in place including notifiable diseases.

By registering to receive EEDAS alerts from APHA, you can decide how you wish to receive them. From EEDAS you can decide how you wish to receive them via email, text message or both. If you wish to register to receive these notifications then please email siu@apha.gov.uk with your email address you would like us to use and your mobile phone number.

Animal & Plant Health Agency

EEDAS alerts

- Endemic and Emerging Disease Alert System

Common diseases in small and backyard poultry flocks in Great Britain (excluding gamebirds)

Due to the increased popularity of small flock and backyard poultry keeping, vets may find that they are asked to examine and treat more poultry (frequently chickens) from such flocks. It is therefore important to be aware of common diseases that can affect small poultry flocks to aid investigation and differential diagnosis of bird and flock health problems and safeguard the birds' welfare.

Important legislation to be aware of includes:

- Flocks of 50 or more birds are required to be registered with APHA, and owners are also encouraged to register smaller flocks. Information and registration forms can be found at <https://www.gov.uk/government/publications/poultry-including-game-birds-registration-rules-and-forms>
- Any suspicion of notifiable disease (avian influenza or Newcastle disease) must be reported to APHA. Further information can be found at <https://www.gov.uk/guidance/avian-influenza-bird-flu> and <https://www.gov.uk/guidance/newcastle-disease>
- It is illegal to feed catering or kitchen waste to farmed livestock and poultry, even if they are being kept as pets.

Respiratory disease
This is one of the commonest clinical presentations in small and backyard poultry flocks. Respiratory diseases are often multifactorial and may be caused by non-infectious (eg. dust, ammonia) and/or infectious causes. The latter include viruses such as infectious laryngotracheitis (ILT) virus, infectious bronchitis virus (IBV) and Mycoplasma gallisepticum (MG).

Infectious Bronchitis (IB) is an acute, highly contagious viral respiratory disease of high morbidity and typically low mortality which can also be accompanied by a sharp drop in egg production and can affect egg quality. Neurological signs are not a feature. Some strains of IB have been associated with renal damage and mortality. Vaccination against IB is available for small scale commercial flocks.

Information notes

Surveillance Focus

Antibiotic prescribing challenges in smallholder poultry

This focus article has been prepared by Fraser Broadfoot of the Veterinary Medicines Directorate.

IT IS estimated that 1.4 per cent of households in the UK own domestic fowl, accounting for 1.4 million birds. This article aims to explore some of the challenges around treating smallholder chickens (commonly referred to as backyard chickens), particularly in light of a study carried out by the Small Animal Veterinary Surveillance Network (SAVSNET) that explored prescription patterns for smallholder poultry – birds kept by small scale poultry keepers and hobbyists and poultry kept as pets – from approximately 50 per cent of pet and hobbyist practice across the UK between 1 April 2014 and 31 March 2019.

Clinical presentation
The SAVSNET study used data collated from electronic health records (EHRs) submitted by the practices involved. When looking at the presenting clinical signs recorded for smallholder poultry in EHRs, several non-specific signs and terms that indicate advanced disease are used, with the leading cause being 'Unspecific illness' and 'Weight' (Table 1).

Similar terms are also found when looking at the Great Britain avian disease surveillance dashboard for non-commercial and small chicken flocks (which covers flocks with a maximum of 500 egg-laying chickens and 2000 chickens reared for meat).

It is estimated that 1.4 per cent of households in the UK own domestic fowl

24 | www.gov.uk/government/publications/veterinary-medicines | 19th July 2022 (VET RECORD)

Vet record focus articles

Future opportunities

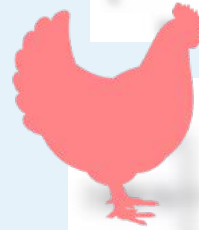


Avian: GB disease surveillance and emerging threats reports

Table: Top 10 diagnoses of chickens by APHA

Rank	Year	Prev. year	Last 10 years
1	Not listed - digestive	E cecorum	Colisepticaemia
2	Ricketts	Ricketts	Coccidiosis
3	Colisepticaemia	Colisepticaemia	Infectious bronchitis
4	Gizzard erosion due to adenovirus	Inclusion body hepatitis	Chronic bursal atrophy
5	Gizzard erosion - NOS	Not listed - digestive	Not listed – digestive
6	Poor intestinal health in broilers	Gizzard erosion - NOS	Yolk sac infection/omphalitis
7	Blackhead	Gizzard erosion due to adenovirus	Gizzard erosion – NOS
8	Coccidiosis - Eimeria acervulina	Egg peritonitis	Septicaemia
9	TVP	TVP	IBD/gumboro
10	Coccidiosis - eimeria maxima	Neoplasm	Egg peritonitis

Future opportunities



Summary

Understand AEGs work and place in APHA

- Postmortems are good value
- We are here to help

Have a basis to critically appraise your data and outputs

Thought on Q report contents or other AEG outputs



Thank you for listening

Routine reporting of
specific disease status
using APHA data?

Top 10 lists
- With further deep dive

Frequency?

What do you want?



OGI

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