

Examples of APHA's collaborative approach to avian disease investigation

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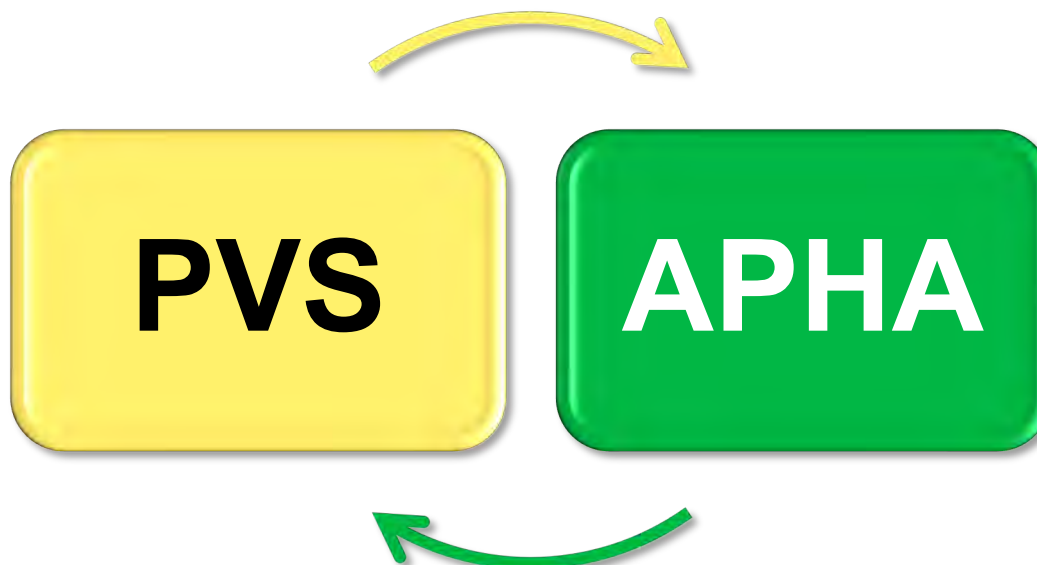
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Avian vets – our most important partners

Diagnostic submissions, field expertise and anecdotal evidence



Subsidised post-mortems, histopathology and other diagnostic tests



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**Veterinary Investigation Diagnosis
Analysis (VIDA) Annual Report**

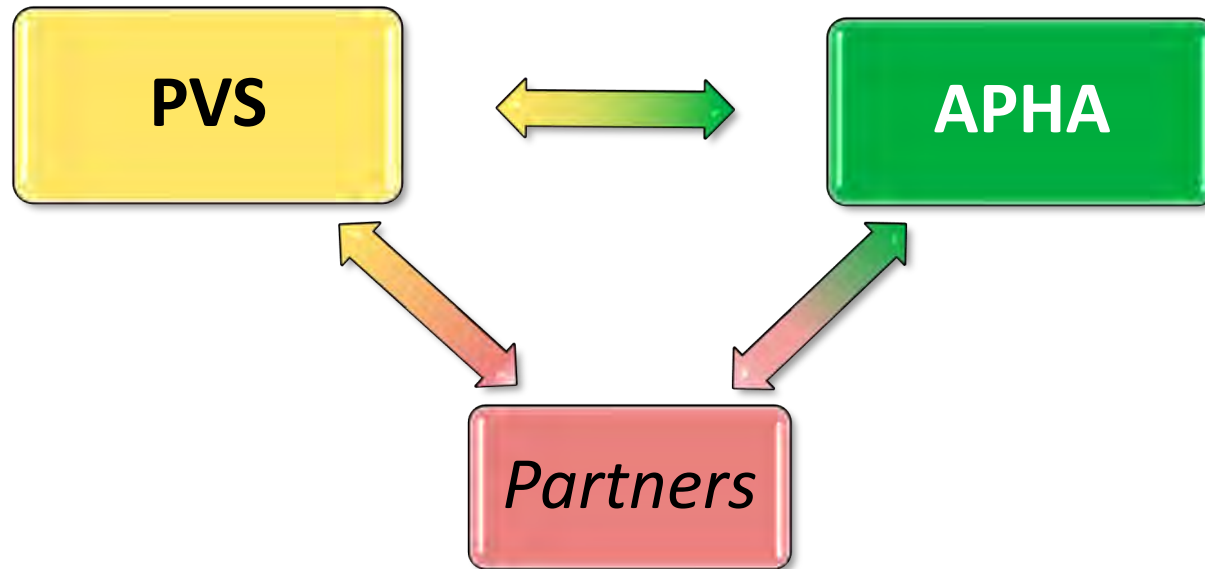
VetRecord
Surveillance



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**GB Avian Disease Surveillance Dashboard for
Non-commercial and Small Chicken Flocks**

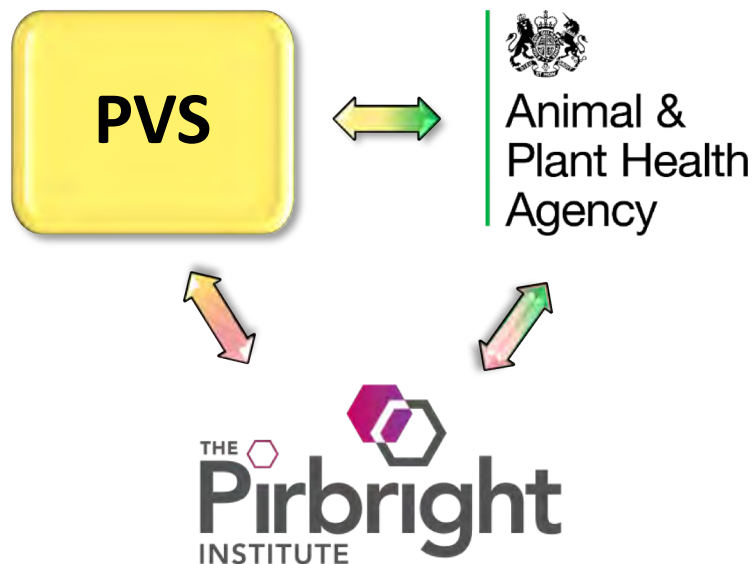
Expanding the collaborative network



- Domestic and international partnerships with specialist diagnostic laboratories and research institutes
- Support diagnostic service and enhance surveillance

Collaborative case examples

Case 1



Case 2



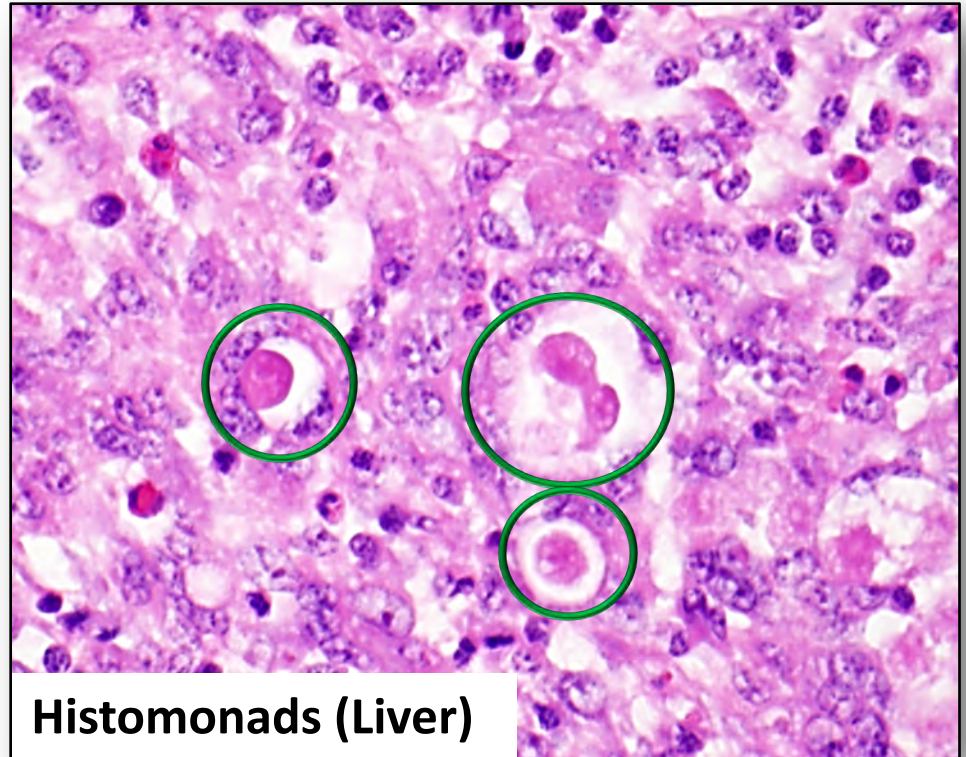
CASE 1 – PVS / diagnostic submissions

PVS field investigation

- **Broiler Breeders**
 - 34 -weeks-old
- **Clinical presentation**
 - Persistent mortality
 - Lagging egg production
 - Weak and pale birds
 - Bacteriology unrewarding

APHA Lasswade

- **Histopathology**
 - Histomoniasis
 - Coccidiosis
 - Suspected necrotic enteritis
 - *Mononuclear proventriculitis*



Case 1 – APHA PME

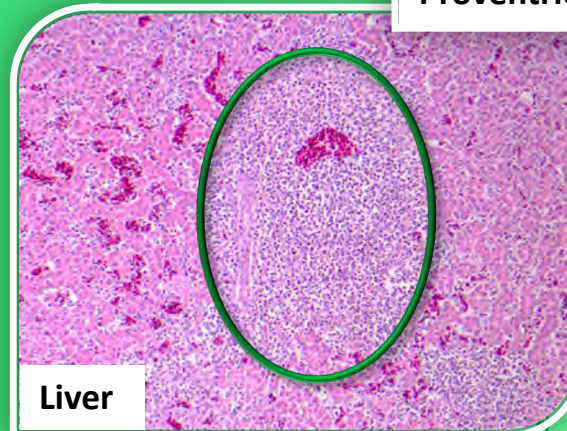
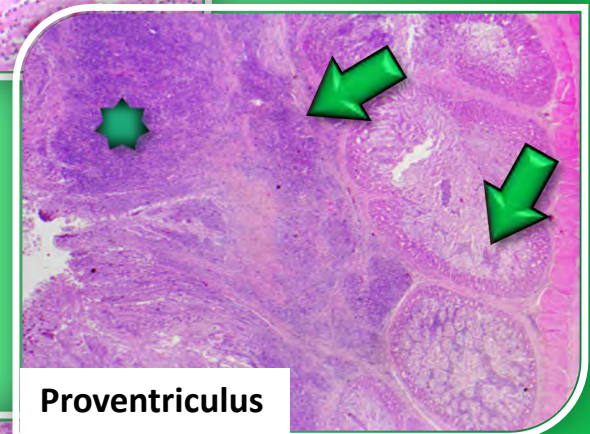
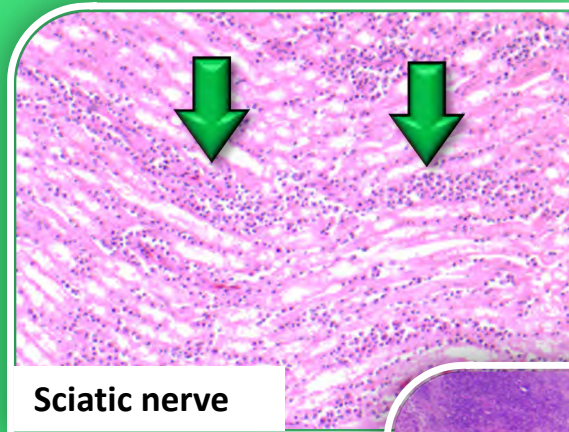
- **Complex set of findings**

- Histomoniasis
- Coccidiosis
- Colisepticaemia
- Egg peritonitis
- Splenomegaly
- Hepatomegaly

- **Mononuclear infiltration**

- Autolysis
- Proventriculus
- Sciatic nerve
- Liver
- Kidney

Underlying Marek's disease?



Diagnostic partner



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Marek's disease virus reference laboratory (MDVRL)*

RT-PCR results of avian samples submitted for virulent MDV testing

<u>House 1</u>		<u>House 2</u>	
Bird 1	✓	Bird 1	✓
Bird 2	✓	Bird 2	✓
Bird 3	✓	Bird 3	✓

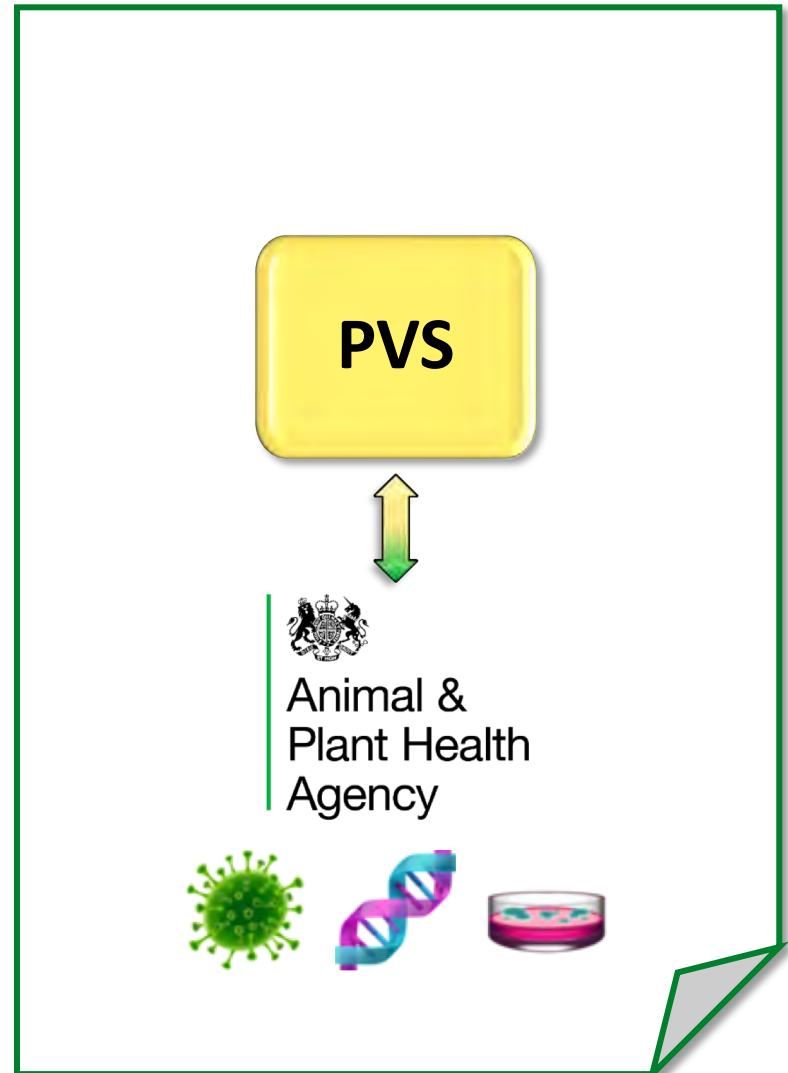
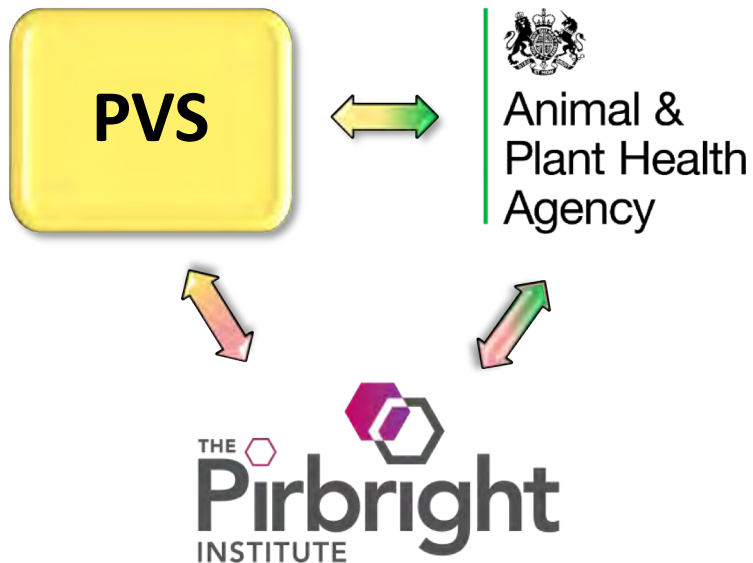
* Special thanks to Dr Sue Baigent

Collaborative case examples



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Case 1



Case 2 – PVS and APHA PME

PVS field investigation

- Free-range layer hens
 - 22-week-old
 - Site with multiple ages and groups
- Clinical presentation
 - Found dead
 - Slight reduction in egg production

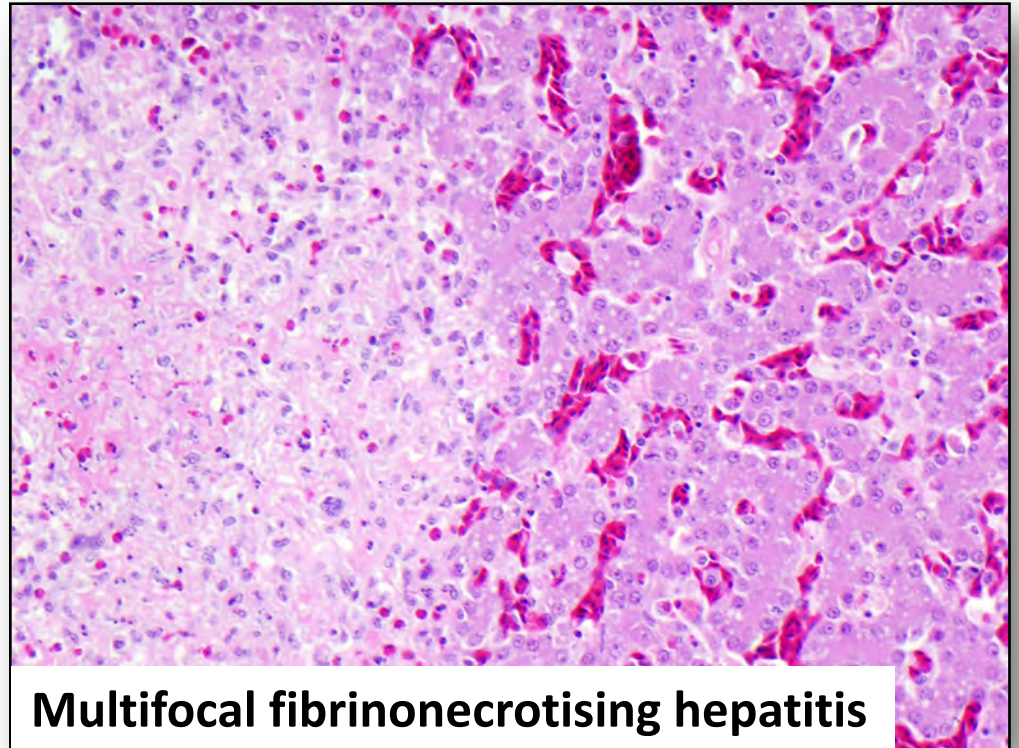
APHA PME



New disease surveillance

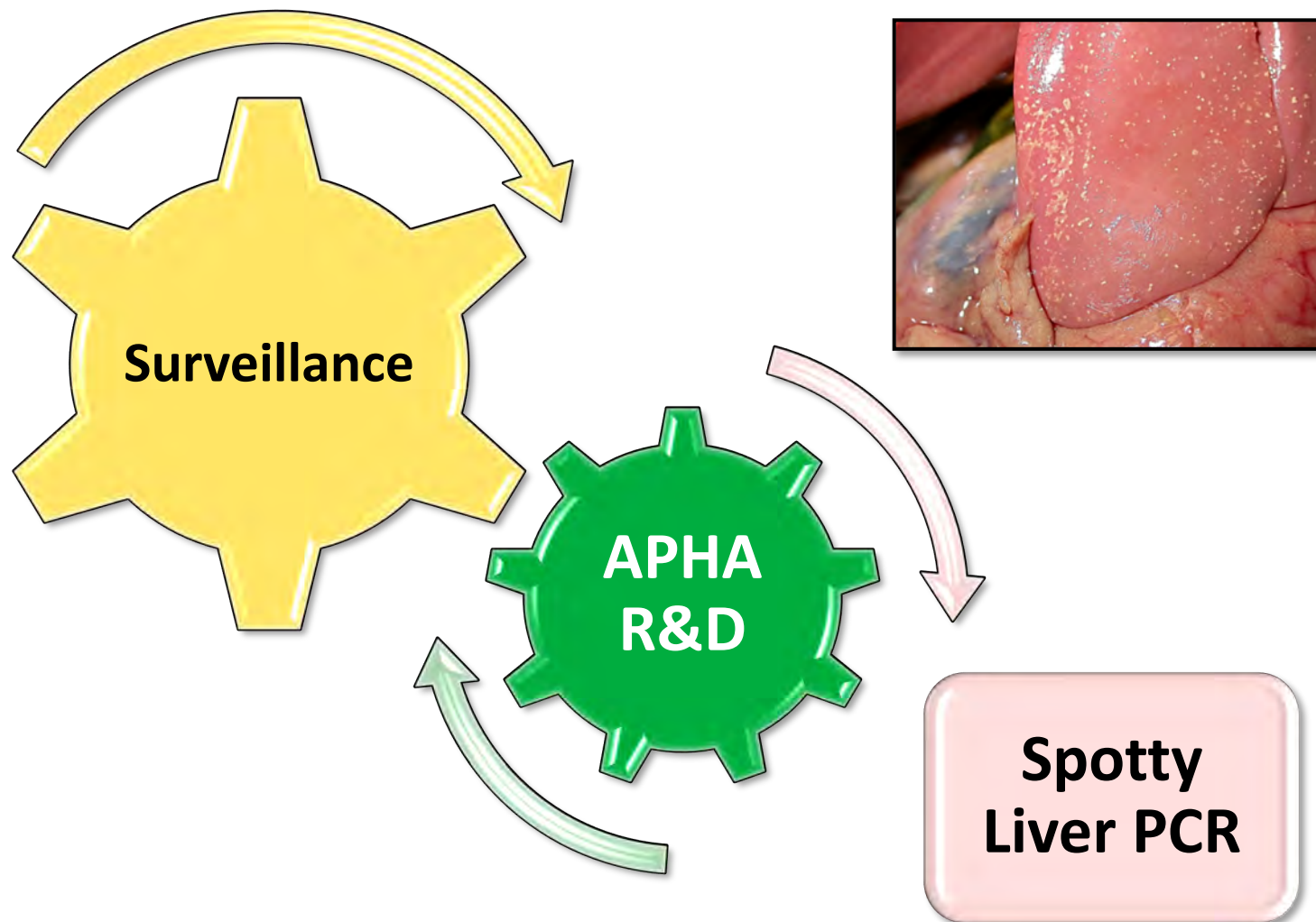
Spotty liver disease

- Aetiology
 - *Campylobacter hepaticus*
- Current diagnosis
 - PM findings
 - Unrewarding bacteriology
 - Response to antibiotic treatment
 - Histopathology
- Future diagnosis
 - Molecular testing



Multifocal fibrinonecrotising hepatitis

Surveillance drives R&D





Summary

Avian vets are the **APHA**'s most important collaborative partner!

We depend on your field expertise and diagnostic submissions to create APHA surveillance data.

The APHA has extensive collaborative **partnerships** to help solve complex cases.

Surveillance data drives APHA R&D.



APHA surveillance links

APHA national surveillance network

<http://apha.defra.gov.uk/vet-gateway/surveillance/diagnostic/national-network.htm>

APHA veterinary investigation diagnosis analysis

<http://apha.defra.gov.uk/vet-gateway/surveillance/scanning/vida.htm>

APHA small flock avian disease surveillance dashboard

<http://apha.defra.gov.uk/vet-gateway/surveillance/scanning/disease-dashboards.htm>

APHA Scanning surveillance reports

<http://apha.defra.gov.uk/vet-gateway/surveillance/reports.htm>

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Thank you.
Any questions?