Animal &
Plant Health
Agency

Zoonoses and Veterinary Public Health

Quarterly report Q1 – January to March 2025

Project FZ2100

Published: June 2025

Data Protection:
For information on how we handle personal data visit www.gov.uk and search Animal and Plant Health Agency Personal Information Charter.

This publication is available at www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at

www.gov.uk/apha

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.

Contents

Background

Monitoring the occurrence of certain animal diseases can highlight the potential for zoonotic transmission and provide an indication of human, environmental, and foodborne health risks. These Zoonoses and Veterinary Public Health reports summarise the surveillance activities of the Animal and Plant Health Agency (APHA), APHA partner postmortem providers and Scotland's Rural College (SRUC) Veterinary Services, for zoonoses and infections shared between humans and animals in Great Britain. Data (which primarily relates to farmed animal species) gathered by the network of Veterinary Investigation Centres is used for the production of the quarterly and annual report summaries. Quantitative diagnostic data for all of Great Britain is provided by the Veterinary Investigation Diagnosis Analysis (VIDA) surveillance system. Summaries of veterinary public health investigations into incidents and outbreaks of zoonotic disease and associated activities are also included. This report covers the relevant VIDA data and zoonoses investigations for Quarter 1 (January to March) 2025.

The Zoonoses and Veterinary Public Health project (designated the FZ2100 project) is funded by Defra, the Scottish Government and the Welsh Government through the APHA's Bacterial Diseases and Food Safety portfolio. The FZ2100 project also uses returns from scanning surveillance projects.

This report provides information about non-statutory zoonoses, as well as *Coxiella burnetii* (Q fever), avian chlamydiosis (in psittacines), and brucellosis in dogs, which were made reportable in Great Britain in 2021. The detection of *C. burnetii* and brucellosis in dogs were made reportable through amendments to the Zoonoses Order (2021). The Psittacosis (Ornithosis) Order is the legislation that covers avian chlamydiosis. Non-statutory zoonoses are defined as any zoonoses for which no specific animal-health derived legislation exists and so excludes *Salmonella* and those diseases which are compulsorily notifiable in specified animal species, for example, tuberculosis (TB), which is notifiable in all mammals. Information concerning notifiable and other reportable zoonoses is recorded elsewhere, some under specific projects such as FZ2000 (*Salmonella*).

1. General scanning surveillance

1.1 Zoonoses VIDA data for Great Britain: January to March 2025

Table 1 (collated 2 May 2025) summarises general scanning surveillance VIDA data for clinical diagnoses of potential zoonotic organisms that may be shared between animals and humans from specimens submitted to APHA, APHA partner postmortem providers and SRUC Veterinary Investigation Centres for the 3-month period between January and March 2025. The table also compares the latest findings with the data for Quarter 1 for the preceding 2 years, 2024 and 2023. It includes rare zoonotic infections and those for which zoonotic potential is confined predominantly to immunocompromised individuals. Diagnoses use strict criteria and are recorded, once per incident, using the VIDA system.

The list is subject to selection, submission, and testing bias. It is not definitive and excludes notifiable and most reportable diseases, notably salmonellosis, which is recorded elsewhere.

Table 1. General scanning surveillance: Zoonoses VIDA data for Great Britain, January to March 2025 – all species

Table notes:

- species columns are: Cattle; Sheep; Goats; Pigs; Birds; Misc. which includes miscellaneous and exotic farmed species; and Wildlife
- '-' in a cell indicates that a diagnosis is not available for that species
- birds: data for birds includes domestic and wild birds
- wildlife: data for wildlife includes mammals only

VIDA codes	Diagnosis	2023	2024	2025	Cattle	Sheep	Goats	Pigs	Birds	Misc.	Wildlife
311	Babesiasis	0	0	0	0	-	-	-	-	-	-
258, 659	*Brachyspira pilosicoli* (intestinal spirochaetosis)	14	15	21	-	-	-	20	1	-	-
013	*Campylobacter* fetopathy	151	81	82	1	81	0	-	-	0	0
282	Chlamydiosis (*C. psittaci*)	0	0	0	-	-	-	-	0	-	-
014	*Chlamydia abortus* fetopathy	116	142	85	0	85	0	-	-	0	0
732	*Corynebacterium pseudotuberculosis* (CLA)	3	4	1	-	1	0	-	-	-	-
318	Cryptosporidiosis	79	75	63	61	2	0	0	0	0	0
362	Cysticercosis	0	0	0	-	0	0	-	-	-	-
193	*Dermatophilus* infection	0	0	0	0	0	0	-	-	0	0
022, 133, 615	Erysipelas	8	3	3	-	1	0	1	1	0	-
371, 372, 373	Fasciolosis	49	54	53	16	36	1	-	-	0	0
363	Hydatidosis	0	0	0	-	0	-	-	-	-	-

VIDA codes	Diagnosis	2023	2024	2025	Cattle	Sheep	Goats	Pigs	Birds	Misc.	Wildlife
015, 136, 139	Leptospirosis (all categories)	1	0	2	1	0	0	1	-	0	0
016, 140, 150, 189, 711	Listeriosis (all categories)	56	64	70	16	51	2	0	0	1	0
217	Louping ill	1	2	1	0	1	-	-	0	0	-
225	Orf (parapox virus)	4	7	5	-	5	0	-	-	0	-
152,153, 157, 158	*Pasteurella multocida* pneumonia (pasteurellosis)	73	86	68	55	6	0	4	2	0	1
223	Pseudocowpox (parapox virus)	0	0	1	1	-	-	-	-	-	-
027, 262	Q Fever (*Coxiella burnetii)*	3	1	0	0	0	0	-	-	0	0
374	Red Mite *(Dermanyssus gallinae)*	0	0	0	-	-	-	-	0	-	-
195	Ringworm	0	1	1	1	0	0	0	0	0	0
379, 392	*Sarcoptes scabei* infection	0	1	1	0	-	0	1	-	0	-
024, 171, 172, 644	Streptococcal infection (excluding bovine mastitis)	34	49	20	0	0	0	20	0	0	0
745	Swine influenza	15	16	2	-	-	-	2	-	-	-
026, 315	Toxoplasmosis, including fetopathy	108	85	42	-	42	0	-	-	0	0
142	Tuberculosis, excluding bovine *M. bovis*	12	11	1	-	0	0	0	0	1	0
034, 154	Yersiniasis (including fetopathy*)*	10	3	12	1	6	0	3	2	0	0

The table is intended only as a general guide for veterinary and public health professionals to the diagnosed occurrence of animal-associated infections in predominantly farmed animal species in Great Britain.

Common minor diseases of zoonotic importance, such as orf and ringworm, are grossly underestimated by the VIDA recording and reporting system, as it is unusual for practising veterinary surgeons to submit material for diagnosis.

Further information on scanning surveillance activities is available at Animal disease scanning surveillance at APHA - GOV.UK

1.2 Highlights from APHA and SRUC disease surveillance centres

This section provides information on a few noteworthy findings of zoonotic interest from material submitted to the APHA (England and Wales), APHA partner postmortem providers and SRUC Veterinary Services (Scotland) during January to March 2025.

Further information is provided in the quarterly reports by the APHA species groups and the monthly surveillance reports in the Vet Record derived from scanning surveillance, which can be found at View APHA surveillance reports, publications and data - GOV.UK

The species expert group quarterly reports provide comprehensive details on scanning surveillance activities, covering avian, cattle, small ruminant, pigs, miscellaneous and exotic farmed species, and wildlife.

Rhodococcus hoagii infection in goats

The disease surveillance section of the 1/8 March 2025 edition of the Vet Record contained an interesting article about *Rhodococcus hoagii* infection in goats. *R. hoagii* is a ubiquitous soilborne bacterium that can cause opportunistic infections, with pyogranulomatous lesions in lungs and lymph nodes and abscesses in other organs. It has a worldwide distribution, can infect a range of wild and domestic species, including human beings, and is a significant pathogen in horses. The route of infection can be inhalation of contaminated dust or consumption of contaminated food and water.

Pneumonia and organ abscesses are the most common clinical findings in goats. Cases are rarely reported in goats, suggesting the pathogen is opportunistic and infection is probably secondary to immunosuppressive conditions. Further information about this case is available at: Disease surveillance in England and Wales, February 2025 - 2025 - Veterinary Record - Wiley Online Library

Yersinia pseudotuberculosis associated with abortions in ewes and enteritis in lambs

The disease surveillance section of the 29 March-12 April 2025 edition of the Vet Record contained an interesting article about *Yersinia pseudotuberculosis* infection in sheep with

information on two cases of ovine abortion and a case of enteritis in lambs. *Y. pseudotuberculosis* is associated with wet, muddy, waterlogged conditions. Exposure of feed material to silt can also trigger outbreaks. It can be carried by several wild and domestic species but only occasionally causes clinical disease or deaths. Further information about the cases can be found at: Disease surveillance in England and Wales, March 2025. *Y. pseudotuberculosis* is also zoonotic, primarily as a foodborne disease following consumption of contaminated food or water.

2025 lambing and ovine abortion update

Although lambing for some sheep flocks has been taking place since January 2025, most flocks lamb during spring. There will be an update on ovine abortion diagnoses in the April to June quarterly report. Zoonotic advice is provided to submitting private veterinary surgeons by Veterinary Investigation Officers. Additional advice on the risks of infections that can be transmitted via contact between pregnant women and parturient / post-parturient animals is provided on the GOV.UK website: Pregnancy: advice on contact with animals that are giving birth. Public Health Wales have issued similar guidance: Advice issued to pregnant women during lambing season - Public Health Wales (nhs.wales)

2. Specific scanning and targeted surveillance and other studies

2.1 Campylobacter

Human campylobacteriosis is usually caused by the thermophilic *Campylobacter* species *C. jejuni* and *C. coli*, which can be found in a wide range of livestock, poultry and wildlife species. Poultry and poultry meat products are the main sources for human infection, and campylobacteriosis is the most commonly reported bacterial cause of food poisoning. The United Kingdom Food Security Report 2024 indicated that there were 71,710 laboratory-confirmed human infections in 2023, 66,327 in 2022, and 67,546 in 2021.

This Zoonoses and Veterinary Public Health report does not cover foodborne illness related to *Campylobacter* infection. However, non-thermophilic *Campylobacter* strains (such as *C. fetus*) can also, rarely, cause severe systemic illness in people. Only *Campylobacter* fetopathy numbers are detailed in Table 1 above.

England and Wales

In Q1 2025 there were a total of 77 *Campylobacter* isolates identified by the APHA Starcross laboratory, which were mainly from ruminant abortions and comprised:

- Bovine – there was one isolate which was *C. fetus venerealis intermedius*.
- Ovine – a total of 76 isolates: 2 *C. coli*, 71 *C. fetus fetus*, 2 *C. jejuni*. and 1 *C. lari.*

Scotland

SRUC Veterinary Services had a total of 26 *Campylobacter* isolates during Q1 which were:

- Bovine – there was one isolate which was *C. fetus* not-typed.
- Ovine – a total of 12 isolates: all *C. fetus* not-typed.
- Canine – a total of 12 isolates: 3 *C. upsaliensis* and 9 *C. jejuni.*
- Zoo animals – there was one isolate (from a Cheetah) which was *C. jejuni.*

2.2 Leptospirosis

Targeted surveillance by APHA for leptospirosis is variously achieved by analysis of results from:

1. Real-time polymerase chain reaction (RT-PCR) for pathogenic leptospires on appropriate diagnostic samples.

2. Microscopic agglutination test (MAT) antibody testing on sera submitted for disease diagnosis; or for monitoring and export (mainly dogs). Diagnostic MAT titres are considered seropositive at 1/100 or above (1/50 for *L.* Hardjo bovis in cattle).

3. Milk antibody testing by enzyme-linked immunosorbent assay (ELISA) of bulk tank samples submitted from dairy herds for monitoring purposes.

The last two methods are influenced by vaccination (dogs and cattle). MAT results are also very dependent on the range of serology (pools or single serovars) undertaken.

Kidney specimens examined by RT-PCR for pathogenic leptospires

Between January and March 2025, a total of 82 kidney specimens (kidneys from 13 cattle, 63 pigs, 1 goat, and 5 foxes) were submitted for testing by RT-PCR for pathogenic leptospires. There were 2 positive kidney test results, 1 pig and 1 fox. Four of the submitted samples (all porcine) were unsuitable for testing because they were too autolysed.

Serology for *Leptospira* serovars

During Q1 2025, a total of 556 serum samples from a range of species were tested for *Leptospira* antibodies. Of these, 87 canine sera were tested for export purposes and 29 canine sera were tested for diagnostic purposes. There were 51 porcine samples which were tested for *L.* Bratislava, and 362 bovine samples were tested for *L.* Hardjo bovis.

Table 2. Single *Leptospira* serovars tested in dogs, pigs, and cattle expressed as percentage positive for the number of samples tested for each serovar

Table notes:

- more than one serovar may be detected in a serum sample
- abbreviations used in this table:

    - Canine E. = canine export (dogs tested for export purposes)
    - Canine D. = canine diagnostic (dogs tested for diagnostic purposes)
- the total tested columns are the numbers of samples tested for each serovar
- % positive is the percentage of each tested serovar which gave a positive result, for example 17.2% of 87 canine export samples tested were positive for *L.* Canicola antibodies

Species	Serovar	Total tested: Q1 2025	% positive	Total tested: Q1 2024	% positive
Canine E.	*L.* Canicola	87	17.2	118	16.1
Canine E.	*L.* Icterohaemorrhagiae	3	0	18	0
Canine D.	*L.* Australis	1	100	9	66.7
Canine D.	*L.* Autumnalis	0	0	9	22.2
Canine D.	*L.* Bratislava	22	0	35	22.9
Canine D.	*L.* Canicola	27	14.8	37	10.8
Canine D.	*L.* Copenhagenii	24	12.5	41	53.7
Canine D.	*L.* Grippotyphosa	1	0	5	20
Canine D.	*L.* Icterohaemorrhagiae	29	3.4	41	4.9
Canine D.	*L.* Pomona	0	0	5	40
Canine D.	*L.* Sejroe	2	50	4	25
Porcine	*L.* Bratislava	51	31.4	87	10.3
Bovine	*L.* Hardjo bovis	362	7.7	241	12.9

In addition to single serovars, *Leptospira* pools (multiple serovars) are tested on a significant number of canine, porcine, and bovine samples. Pooled serovars are not included in the above data.

L. Hardjo bulk milk antibody tests

Between January and March 2025 there were 16 bulk milk *L.* Hardjo antibody tests for monitoring purposes, which gave the following results: 7 (43.7%) were negative, 0 (0.0%) were low positive, 5 (31.3%) were mid positive, and 4 (25.0%) were high positive.

For comparison, between January and March 2024 there were 8 bulk milk *L.* Hardjo antibody tests (for monitoring purposes), which gave the following results: 4 (50.0%) were negative, 1 (12.5%) was low positive, 0 (0%) were mid positive, and 3 (37.5%) were high positive.

The significance of these observations is heavily influenced by vaccination status and selection, although it is thought unlikely that fully vaccinated herds contributed many samples. Low submission numbers also make comparisons across the two years difficult.

2.3 Mycobacteria (excluding bovine cases of *M. bovis*)

Since *Mycobacterium bovis* became notifiable in all species in 2006, the number of samples examined by APHA has increased, particularly from pets and camelids. Samples from pigs are mainly submitted by Official Veterinarians at abattoirs.

The APHA testing protocol changed in March 2022 whereby all new submissions from non-bovine animals have been tested by PCR, which detects the *M. tuberculosis* complex and *M. bovis*. If positive for the *M. tuberculosis* complex and *M. bovis*, the sample is sent for culture to establish the whole genome sequencing (WGS) clade of *M. bovis*.

If positive for the *M. tuberculosis* complex and negative for *M. bovis*, an unvalidated PCR for *M. microti* is carried out. If the PCR is positive for *M. microti*, culture is carried out and if the Mycobacterium grows in culture, the isolate is confirmed by WGS. If the PCR for *M. microti* is negative, culture is carried out to establish the Mycobacterium present (possibilities include other members of the *M. tuberculosis* complex such as *M. tuberculosis* or *M. caprae*).

This testing protocol means that we do not receive results for as wide a range of non-statutory *Mycobacterium* sp. as compared to the historic testing protocols. TB (*M. bovis*) in non-bovine animals' data is in the TB_in_Non_Bovine_Species_2011_2024_dataset.

A yearly summary of *Mycobacterium* sp. identified is provided in the annual Zoonoses and Veterinary Public Health reports.

2.4 Q fever

PCR is used to confirm the presence of *Coxiella burnetii*, typically following the identification of suspicious acid-fast bodies in Modified Ziehl-Neelsen (MZN)-stained smears of placentae (or foetal samples). Confirmation of Q fever as a cause of fetopathy requires histopathology and immunohistochemistry of placental tissue, in addition to a positive PCR result. In each case when *C. burnetii* is detected by PCR, public health colleagues are informed of the incident and the zoonotic potential of this organism is highlighted to the farmer and private veterinary surgeon, with the provision of an advisory sheet about Q fever.

Comparisons of Q fever data with previous years should be made with caution because from April 2021 Q fever has been a reportable disease. Since 2023 there has been a notable increase in bovine test requests for the APHA *C. burnetii* PCR test. It is important to note that an increase in the detection of *C. burnetii* does not necessarily equate to an increased prevalence.

During the period January to March 2025 a total of 26 (18 bovine, 8 ovine) samples were tested for the presence of *C. burnetii* by PCR. Of these, *C. burnetii* was detected in four of the bovine samples. The *C. burnetii* PCR has been validated for placental and foetal fluid samples, although other samples are also tested on agreement with the customer.

Table 3. Samples tested by PCR for the detection of *C. burnetii* during January to March 2025

Table notes:

- Species tested comprised cattle and sheep
- Negative – *C. burnetii* was not detected; Positive – *C. burnetii* was detected
- Sample types this quarter included placenta, foetal fluid, and foetal tissue

Species	Samples tested	Negative	Positive	Positive Submissions	Positive farms	Placenta positive	Foetal fluid positive	Foetal tissue positive	Swab positive
Cattle	18	14	4	4	4	1	3	-	-
Sheep	8	8	0	0	0	-	-	-	-

All four positive farms were dairy farms, one in England and three in Wales. Further information about the positive submissions is provided in section 3.4.

In addition, during Quarter 1 2025 the detection of *C. burnetii* in 10 bovine bulk milk samples by PCR at an overseas laboratory (5 from English dairy farms, 4 from Welsh dairy farms, and 1 from a Scottish dairy farm) were reported to APHA. During this period two other private veterinary laboratories reported the detection of *C. burnetii* in submissions from three farms which comprised two placental samples (one bovine and one ovine) from two farms in England, and vaginal swabs from a dairy herd in Scotland.

2.5 *Streptococcus suis*

Streptococcus suis isolates from diagnostic material submitted to APHA and SRUC Veterinary Investigation Centres are typed further for disease surveillance purposes. The submission numbers and serotypes from porcine diagnostic material submitted during the period January to March 2025 are shown below, with data for the previous 2 years (Q1 2024 and Q1 2023) for comparison.

Table 4. *Streptococcus suis* serotypes from porcine diagnostic material

Table notes:

- UT = untypeable
- 1/2 = is a recognised distinct serotype which reacts with both 1 and 2 antisera
- brackets indicates the serotype

	1/2	1	2	3	4	5	7	8	9	13	14	19	23	33	34	UT	Total
Q1 2023	-	2	14	2	3	-	3	-	-	-	-	1	-	-	1	5	**31**
Q1 2024	1	2	7	1	-	2	6	2	1	1	1	-	1	-	-	5	**30**
Q1 2025	2	3	7	3	-	1	3	1	-	1	1	-	-	-	-	7	**29**

Serotype 2 was the most common serotype in Q1 for all three years, 2023, 2024 and 2025.

2.6 Toxoplasmosis

The European Food Safety Authority (EFSA Journal 2007, 583, 1 to 64) highlighted the significance of toxoplasmosis as a foodborne zoonosis and the need to improve surveillance in this field. Serological examinations for *Toxoplasma gondii* using the latex agglutination test (LAT) are undertaken by APHA on sera submitted to Veterinary Investigation Centres. The findings presented below provide a summary of the serological status of samples submitted for diagnosis, monitoring and screening purposes during January to March 2025, but do not constitute a structured survey. Positive samples, as defined here, have LAT titres of 1/64 or greater and indicate a history of exposure to this protozoan parasite. Toxoplasmosis as a cause of fetopathy in sheep and goats is diagnosed through antigen (PCR) testing of placental cotyledon.

During the period January to March 2025 ten ovine samples and no goat samples were submitted for Toxoplasma serology. There were 6 positive titres. Toxoplasma fetopathy figures for sheep and goats are provided in Table 1.

3. Investigations into zoonotic and potentially zoonotic incidents

Protocols for the investigation of zoonotic disease incidents in England and Wales are set out in the Guidelines for the Investigation of Zoonotic Disease (England and Wales).

There is similar guidance on the investigation and management of zoonotic disease in Scotland.

Advice for members of the public planning a trip to animal-associated visitor attractions, and other information, can be found on the UK Health Security Agency (UKHSA) zoonotic disease webpage.

The Industry Code of Practice for preventing or controlling ill health from animal contact at visitor attractions is available on the National Farm Attractions Network website.

The APHA-assisted investigations described within sections 3.1 Cryptosporidiosis, 3.2 STEC (Shiga toxin-producing *Escherichia coli*) and 3.3 *Corynebacterium ulcerans* cover England and Wales.

3.1 Cryptosporidiosis

Investigations to assist in human outbreaks of cryptosporidiosis linked to direct contact with animals are undertaken at the request of Consultants in Communicable Disease Control (CsCDC) of the UKHSA and Public Health Wales (PHW) and in collaboration with the National Cryptosporidium Reference Unit, Swansea, and follow jointly agreed guidelines. Consultants in Public Health Medicine (CsPHM) lead on these zoonoses investigations in Scotland.

Quarter 2 (Q2) is traditionally the busiest time for cryptosporidiosis investigations and is related to the frequency of open farm visits undertaken by families or school groups around the Easter holiday and bank holidays. Contact with young lambs either through bottle-feeding or handling is a high-risk activity for the zoonotic spread of *Cryptosporidium parvum* in these settings. The availability and accessibility of appropriate and suitably located hand-washing facilities including soap, rather than antimicrobial gel (which is not effective for this pathogen) is extremely important. During the investigation of cryptosporidiosis human outbreaks APHA provides comprehensive veterinary advice including advice on identified deficiencies to assist farm businesses to comply with the Industry Code of Practice for preventing or controlling ill health from animal contact at visitor attractions.

Quarter 1 2025 summary

During Q1 2025 APHA assisted with one cryptosporidium outbreak which was epidemiologically linked to an open farm. Investigations continued into April and an update will be provided in the next quarterly report.

3.2 STEC

Shiga toxin-producing *Escherichia coli* (STEC, formerly known as VTEC) outbreak investigations are undertaken, according to agreed guidelines, at the request of CsCDC of UKHSA and PHW (CsPHM in Scotland) where an animal-associated source is suspected. These investigations often also involve collaboration with other organisations, including the environmental health departments of local authorities and the Health and Safety Executive (HSE). Determination of virulence factors, including shiga toxin genes and comparison of human and animal isolates by whole genome sequence (WGS) analysis, are performed by the Gastrointestinal Bacteria Reference Unit (GBRU), UKHSA Colindale. If isolates from animals circumstantially implicated in outbreaks have an indistinguishable WGS profile to those from human cases, this is taken as confirmatory evidence of the epidemiological

link. Other STECs or WGS types may be detected incidentally during the investigation of animal premises.

Quarter 1 2025 summary

APHA provided advice to a private veterinary surgeon (PVS) who was assisting a dairy client following a STEC detection from a routine monitoring milk sample. This was not linked to any human illnesses or outbreaks. Sampling of cattle is considered of limited benefit given that STEC is an endemic pathogen and shedding can be intermittent. There are no specific animal control measures, for example no commercial vaccine. Control measures for milk producers focuses on milking and milk processing hygiene which is within the Food Standards Agency remit. PVSs are an important and trusted source of advice for clients in these situations and PVSs can contact APHA for additional advice and support.

3.3 *Corynebacterium ulcerans*

Corynebacterium ulcerans was first isolated from cases of throat infection in humans in 1926, with zoonotic outbreaks initially associated with direct contact with farm animals or consumption of unpasteurised milk. More recently zoonotic incidents have been associated with contact with companion animals such as dogs and cats. *C. ulcerans* can be asymptomatically carried in the throat of some dogs and cats. *C. ulcerans* has also been isolated from skin lesions, nasal discharge, and other anatomical sites of clinically unwell dogs and cats. The organism can produce diphtheria toxin, which can cause human disease with the same clinical signs as cutaneous or respiratory diphtheria caused by *C. diphtheriae*.

APHA and SRUC Veterinary Services in Scotland assist public health colleagues in the investigation of human index cases of *C. ulcerans* where there has been animal contact. Similarly; for animal index cases, APHA/SRUC vets will support the private veterinary surgeon and provide animal related advice. The guidance for the public health management of toxigenic *C. ulcerans* in companion animals in England is available online: Public health management of toxigenic C. ulcerans in companion animals.

Toxigenic *C. ulcerans* investigations are multidisciplinary and APHA works closely with public health colleagues to investigate, manage, and provide advice regarding the animals involved. Typically, APHA will also liaise closely with the private veterinary surgeon to facilitate the taking of and testing of swabs, antibiotic treatment, and post-treatment clearance swabs as appropriate. APHA also provides advice on health and safety procedures for private veterinary surgeons and pet owners, including information on cleaning of pet bedding and pet toys. For animal index cases comprehensive information is available in the companion animal public health guidance (see above link).

Quarter 1 2025 summary

During Q1 2025 APHA assisted with 22 pet index cases involving cats and dogs, one horse index case, and two human index cases. There was also an equine case of *C.*

diphtheriae. The pet index cases comprised 7 feline index cases and 15 canine index cases. Of the swabbed contact pets, two dogs in the same household as an index dog, were both infected with toxigenic *C. ulcerans*. All three dogs were treated with antibiotics and cleared the infection.

Although there were two human index cases with pets, only one chose to test the contact pet, which in this case was a dog, in which *C. ulcerans* was not detected.

3.4 Q fever *(Coxiella burnetii)*

In each case when *C. burnetii* is detected by PCR, public health colleagues are informed of the incident and the zoonotic potential of this organism is highlighted to the farmer and private veterinary surgeon, with the provision of an advisory sheet about Q fever.

For all ruminant abortion investigations and reports of the detection of *C. burnetii*, APHA provides comprehensive advice to private veterinary surgeons, including information about optimising ruminant abortion investigations, laboratory testing, and zoonoses advice for private vets to pass on to their farmer clients.

Transmission of *C. burnetii* to humans is most frequently due to inhalation of contaminated aerosols or contaminated dusts. Aerosolised bacteria are spread in the environment by infected animals after normal births or abortion. Birth products contain the highest concentration of bacteria, but *C. burnetii* is also found in urine, faeces and milk of infected animals.

Quarter 1 2025 Investigations summary

During Q1 2025 there were four bovine submissions (from four farms) were *C. burnetii* was detected by PCR (table 3). All four were bovine abortion submissions, although the role of *C. burnetii* regarding the cause of abortion was not determined for each case.

APHA provided advice to public health colleagues regarding a dairy farm (where *C. burnetii* had been detected in a bovine bulk milk sample). The farm is not typically open to the public, but was holding a springtime event during Easter, which included bottle feeding lambs and handling chicks and ducklings. The event was at a location which was separate to the main farm. The farm did not sell any unpasteurised milk; all milk was pasteurised.

3.5 Avian chlamydiosis (psittacosis)

Chlamydia psittaci, the causative agent of avian chlamydiosis (psittacosis), can cause serious human illness. The disease has been described in many species of birds, particularly in parrots, parakeets, budgerigars, and cockatiels. Other commonly affected birds include pigeons and doves. Ducks and turkeys may also be affected, but chickens less frequently. Birds can asymptomatically carry the organism without any signs of disease, or they can become mildly to severely ill.

C. psittaci can lead to inapparent subclinical infection or acute, subacute, or chronic disease, characterised by respiratory, digestive, or systemic infection. The clinical signs are generally non-specific and vary greatly in severity, depending on the species and age of the bird and the *Chlamydia* strain involved. Humans are most likely to contract *C. psittaci* infection through inhalation of dust or aerosols contaminated by secretions from infected birds for example faeces, ocular and respiratory secretions. It is therefore important to follow current health and safety measures when in contact with birds. Further information on psittacosis infection is available online at: Psittacosis - UKHSA guidance and Psittacosis - HSE factsheet.

Quarter 1 2025 summary

The detection of *C. psittaci* in psittacine birds is statutorily reportable to APHA. During Quarter 1 2025 there were two reports of the detection of *C. psittaci* in psittacine birds. Both involved the same premises, which was a park that opened to the public. The first report involved one aviary and the second report (approximately six weeks later) involved another aviary. In both cases mortalities had occurred.

Postmortem findings (in the first report) found birds that were in poor body condition, and there was necrosis of the liver and kidneys. Some birds had green faeces although diarrhoea was not a feature. Histopathological findings suggested chlamydial infection. *C. psittaci* was detected in a pooled faeces sample. Antibiotic treatment commenced on the whole group and the aviaries either side. Following treatment commencing there were no further deaths in the affected aviary and the follow-up pooled faecal PCR testing was negative.

The second report involved three sudden deaths. Liver lesions were reported on postmortem examination and C*. psittaci* was detected by PCR in liver samples from all three birds. Antibiotic treatment was administered to all of the birds. Following this there were no further cases. The premises also decided to treat all of the non-treated aviaries on the holding with a long course of antibiotic treatment with follow up pooled faecal PCR testing in case of latent carrier birds.

No human cases of psittacosis were reported. Biosecurity measures at the premises included single keepers for the affected aviaries, separate personal protective equipment, and appropriate disinfection procedures.

4. *Brucella canis*

Since July 2020, there has been a large increase in the number of incidents of canine brucellosis due to infection with *Brucella canis.* APHA, in liaison with health protection agencies across Great Britain, has been involved in investigating these incidents. The UK Chief Veterinary Officer advised on this potential zoonotic disease in a letter published in the Vet Record in February 2021. Amendments to the Zoonoses Order in 2021 added dogs to the list of animals for which brucellosis is a reportable disease in Great Britain.

Further information is available in APHA's Canine-Brucellosis-Summary.pdf and in our list of Frequently asked Brucella canis testing questions - GOV.UK

General information for the public and dog owners is available on the GOV.UK website.

The Human Animal Infections and Risk Surveillance group (HAIRS) Brucella canis risk assessment outlines the current risk to the UK human population from canine brucellosis.

The British Small Animal Veterinary Association (BSAVA) have published a scientific document on *Brucella canis*

Quarter 1 2025 summary

During the first quarter of 2025, there were 84 epidemiologically separate incidents where there was evidence of infection with *Brucella canis*. All but one were identified by serology and presented at least one other risk factor for *B. canis* infection and were reported to the relevant public health authorities. One of the cases was identified by culture. Twenty positive dogs in this quarter were tested twice, confirming the first result.

In addition, twenty-one tested dogs were serologically positive for *B. canis* with no other risk factors identified and have not triggered an incident response.

Most incidents identified during this quarter involved the testing of a single dog, although this may be subject to change if further information about significant contacts becomes available.

In addition to providing information about *B. canis*, APHA's Imported disease summaries for dogs and cats - GOV.UK document provides a short summary of some other diseases that could be imported into the UK with the importation of dogs and cats. This list is not exhaustive but provides a useful summary and signposts to further information for some conditions of concern.