

APHA, 265  
APHA, 268  
APHA, CAT 2  
(UK)

**Research topics:**

Much of APHA's scientific activity is focused on protecting Great Britain against the threat and impact of a wide variety of animal diseases and other species conflicts. Many of these diseases also infect humans. Our research provides scientific evidence that allows us to provide expert advice and supports policy development for the government and the European Union. We work with farmers, vets and managers in the field and undertake surveillance activities to detect and respond to exotic diseases, and to identify and assess new and emerging diseases in livestock and wildlife.

Our main areas of research include:

- bovine tuberculosis and development of vaccines and diagnostic tests for badgers and cattle
- bacterial diseases and food safety including food-borne bacteria such as *Salmonella*, *Campylobacter* and *E. coli*, bacterial pathogens such as *Brucella* and *Mycoplasma*, and antimicrobial resistance
- avian and mammalian viral diseases such as Newcastle Disease, influenza and Classical Swine Fever, zoonotic and wildlife viral diseases such as rabies and vector-borne diseases
- transmissible spongiform encephalopathies (TSEs)
- wildlife management including wildlife diseases, invasive non-native species, methods development and human-wildlife conflicts

These activities are delivered via the agency's scientific disciplines: epidemiology, virology, bacteriology, pathology, parasitology,

	<p>biomathematics, modelling and risk analysis, molecular biology, immunology and ecology</p>
<p><b>Activities and services currently offered by the infrastructure/installation:</b></p>	<p>The current research areas using the animal high containment facilities included in the TNA offer are bovine tuberculosis (bTB), Classical Swine Fever (CSF), influenza including highly pathogenic avian influenza (HPAI) and Newcastle Disease (ND). Nevertheless, various other cat3 diseases can be studied if necessary.</p>
<p><b>Description of the access to be provided under VetBioNet TNA call:</b></p>	<p>APHA is offering three types of access:</p> <ul style="list-style-type: none"> <li>• 265, facility suitable for undertaking HPAI, ND and CSF (in piglets) experiments. Unit of access 1 month;</li> <li>• 268, large animal category 3 facility suitable for undertaking work in larger farm animals such as bTb in cattle and CSF experiments with pigs. Access units: months;</li> <li>• Category 2 accommodation. To be used in combination with one of the other access offers for vaccination trials in ruminants and pigs Access units: months.</li> </ul> <p>Those using the access will be involved in the design of the experiment. The access themselves will be fully serviced from preparation to ensure all practical, legal and biosafety aspects, to running the experiment (including sourcing all animals and undertaking all procedures and sampling). The material produced from the experiment will be preserved and made suitable for biosafe transport; no analysis will be undertaken by APHA within the framework of the institutional TNA offer.</p> <p>Challenge material can be supplied at extra cost.</p> <p>Timings of access depend on the facilities' work load.</p>

<b>Animal species/pathogens that can be worked on in this infrastructure/installation:</b>	<ul style="list-style-type: none"> <li>• bTB: Cattle vaccination and challenge models;</li> <li>• CSF: Pig vaccination and challenge models;</li> <li>• ND: Poultry and game bird vaccination and challenge models;</li> <li>• Influenza: variety of models including transmission across species (avian to mammals such as pigs or ferrets);</li> <li>• Other diseases are considered on request.</li> </ul>
<b>Travel and subsistence costs:</b>	<p>Travel and subsistence costs will be covered for 3 days of stay per experiment.</p>
<b>Infrastructure/installation ethical rules:</b>	<p>All research involving animals must meet the UK's Animal (Scientific Procedures) Act - which is the national legislation for the European Directive 2010/63/EU - as well as the licensing requirements of this act (premises, project and personal). All experiments have to be approved by the APHA internal ethics committee: <a href="#">Research at APHA - Animal and Plant Health Agency - GOV.UK</a></p>