

Reform of National Animal Health Laboratory Coordination

Introduction

On 15 December 2014, as part of the 2014-15 Mid-Year Economic and Fiscal Outlook smaller government initiative, the Australian Government announced the abolition of a number of Commonwealth bodies, including a subcommittee of the Animal Health Committee (AHC), namely the Subcommittee on Animal Health Laboratory Standards (SCAHLS), and its working groups. This was intended to streamline the number of committees, boards and authorities across the Commonwealth.

Valid laboratory results are essential for diagnosis, surveillance and trade and can only be achieved by the use of quality-assured management practices. In early 2015, the Hon. Barnaby Joyce MP, Minister for Agriculture, indicated that the transition to streamlined arrangements for animal health laboratory functions would be reviewed to ensure that an effective system for laboratory quality assurance remains.

In 2015, AHC members, which includes the chief veterinary officers of the Commonwealth, states and territories, along with representatives from the Australian Animal Health Laboratory (AAHL), the Department of Agriculture and Water Resources and the Department of Environment, undertook a review of SCAHLS. The review aimed to identify the functions of SCAHLS and streamline their coordination arrangements, through which the national animal health laboratory quality assurance system can be maintained and continuously improved. This paper reports the key outcomes of the AHC review.

Role and Functions of SCAHLS

SCAHLS was formed by AHC in 1990 with an objective of coordinating and improving diagnostic laboratory standards and developing relevant technical policies in support of AHC. It reported directly to AHC.

The membership of SCAHLS initially comprised laboratory members of the Commonwealth, state and territory governments in Australia and the New Zealand government. Over the years, it was extended to include private, university and public health laboratories, Animal Health Australia (AHA) and the National Association of Testing Authorities (NATA), as new initiatives were developed to address various challenges and needs in laboratory diagnostics.

By 2014 the functions of SCAHLS included:

Emergency preparedness and response

SCAHLS developed and maintained a laboratory network for rapid and effective responses to major emergency animal disease incidents. SCAHLS was responsible for overseeing the Laboratories for Emergency Animal Disease Diagnosis and Response (LEADDR) network. The network's aim is to standardise or harmonise testing platforms and assays for targeted emergency animal diseases. It is coordinated by AAHL.

Quality assurance



SCAHLS oversighted laboratory proficiency testing activities of the Australian National Quality Assurance Program (ANQAP) and supported other quality assurance functions and activities relevant to emergency animal diseases, including liaison with NATA and other laboratory quality assurance providers.

Australian and New Zealand Standard Diagnostic Procedure (ANZSDP)

SCAHLS maintained and continually improved a compendium of standard diagnostic procedures in support of official testing for endemic and emergency animal diseases in Australia and New Zealand consistent with international standards.

New test development and evaluation

SCAHLS encouraged and facilitated new or modified test development and evaluation, including the maintenance of an online register of test methods suitable for national use in emergency animal diseases.

Reference laboratories

SCAHLS nominated and monitored Australian national reference laboratories for specific diseases that would support national disease control and management programs.

Biosafety and biosecurity

SCAHLS addressed and promoted laboratory biosafety and biosecurity matters associated with the holding and testing of specimens and materials containing animal and zoonotic disease agents.

Training

SCAHLS maintained and enhanced national laboratory capability and performance standards through fostering appropriate training programs and opportunities for relevant professional skills.

National strategies

SCAHLS identified, reviewed and advised on specific national laboratory strategies, policies and regulatory environments concerning emergency animal diseases. SCAHLS supported the role and functions of the World Organisation for Animal Health (OIE) National Focal Point for Veterinary Laboratories.

Stakeholder engagement

SCAHLS maintained active engagement with laboratory stakeholders, including those in international organisations and in the human and plant health sectors, on technical and policy developments and issues. SCAHLS also produced a regular 'SCAHLS Newsletter' to facilitate stakeholder communications.

New Arrangements for National Laboratory Functions

The AHC review of the above SCAHLS functions supported the need for the continuation of essential functions and a range of new arrangements to rationalise their coordination or management.



Generally, AHC will continue to have the overall responsibility for these laboratory functions. Some of the laboratory functions which are performed or coordinated by other bodies will report directly to AHC (rather than as before through SCAHLS). These functions and bodies include:

- The LEADDR network coordinated by AAHL
- ANQAP managed by the Victorian Government Department of Economic Development, Jobs, Transport and Resources
- State-based national reference laboratories and the Australian Animal Pathology
 Standards Program managed by AHA
- Aquatic animal health laboratory diagnostics managed by the Subcommittee on Aquatic Animal Health (SCAAH)

All other activities will be coordinated by a new AHC national laboratory task group (task group). The Department of Agriculture and Water Resources will provide administrative support for the task group and national or international coordination as needed. The task group will meet once a year and on an 'as-needs' basis. Relevant experts for specific laboratory functions will also be invited to join as needed.

The new arrangements for specific functions as previously undertaken by SCAHLS are described in further detail below.

• Emergency Preparedness and Response

The LEADDR network is a national laboratory network that was officially inaugurated in 2009 and has since played a key role in harmonising or standardising testing services for the surveillance and diagnosis of targeted emergency animal diseases of national significance (e.g. foot-and-mouth disease, bluetongue, avian influenza, Newcastle disease, Hendra virus, infection with white spot syndrome virus and infection with ostreid herpesvirus 1 microvariant). Over the years the network has played an important role in supporting national surge response capacity in the event of a disease outbreak.

The LEADDR network presently comprises all government animal health laboratories and the Department of Agriculture and Water Resources. Its operating costs are mainly met by in-kind contributions from jurisdictions with some specific development and maintenance projects funded. The LEADDR Coordinator, who is based at AAHL, will report directly to AHC.

Technical input into the AUSVETPLAN Laboratory Preparedness Manual and the laboratory component of AUSVETPLAN Disease Strategies is crucial to the overall management of emergency animal disease outbreaks. This will continue to be coordinated by the LEADDR Coordinator for development and revision as needed.

Quality Assurance

ANQAP is an internationally accredited provider of proficiency testing programs for veterinary laboratory testing. ANQAP aims to ensure consistent testing quality between participating laboratories through proficiency testing programs for tests important to



national disease control programs, quarantine and export health certification. It targets primarily endemic animal diseases.

ANQAP is financially supported through a cost-recovery or externally funded program-based approach. It is managed by the Victorian Government Department of Economic Development, Jobs, Transport and Resources and will now report directly to AHC.

NATA is an internationally recognised accreditation authority. It provides independent assurance of technical competence for the delivery of products and services, including laboratory testing. National laboratory accreditation allows for the establishment of reliable official testing regimens crucial to maintaining Australia's biosecurity interests.

The Department of Agriculture and Water Resources will continue to liaise with NATA to ensure effective partnership with NATA for the quality assurance of national veterinary testing. This will be achieved through activities under its ongoing Memorandum of Understanding with NATA that covers a number of government policy and regulatory interests, including veterinary testing.

The OIE Focal Point for Veterinary Laboratories for Australia also represents the Department of Agriculture and Water Resources as an observer on the NATA's Veterinary Testing Accreditation Advisory Committee.

ANZSDPs

The task group will facilitate the development and revision of ANZSDPs, a nationally-agreed series of standard diagnostic principles and procedures for specific animal diseases. ANZSDPs aim to support official testing services in the Australian context while supporting the relevant international diagnostic standards.

New Test Development and Evaluation

The function of new/modified test development and evaluation is central to the continual improvement of diagnostic services for regulatory and emergency disease testing purposes. This function underpins ANZSDPs and will be facilitated by the task group.

Reference Laboratories

National reference laboratories for specific diseases play an important role in confirming diagnoses, researching methodologies, providing training and essential reagents and supporting national disease eradication and control programs in Australia. AAHL hosts a number of national reference laboratories through financial support from an annual funding arrangement between CSIRO and the Department of Agriculture and Water Resources.

State-based national reference laboratories for Johne's disease and anthrax have been coordinated by AHA using a three way split co-funding mechanism between the Commonwealth and state governments and the livestock industries.

AAHL also undertakes international reference laboratory functions for OIE and Food and Agriculture Organization (FAO) of the United Nations.



Biosafety and Biosecurity

AAHL plays a lead role in promoting and advising on national (minimum) requirements for containment facility biosafety and biosecurity. AAHL and LEADDR will provide AHC with technical advice on biosafety and biosecurity risks and issues associated with testing and holding of emergency animal disease agents as appropriate.

The Department of Agriculture and Water Resources has a national policy and regulatory role in Approved Arrangements (under the Biosecurity Act 2015) concerning biocontainment facilities.

Other Commonwealth regulatory agencies such as the Office of Gene Technology Regulator and the Office of Security Sensitive Biological Agents within the Department of Health will be consulted for relevant biosafety and biosecurity issues as needed.

Training

The task group will have a role in advising and facilitating specific laboratory training issues as needed.

AHA will continue to manage the Australian Animal Pathology Standards Program, including an archived collection of pathology slides suitable for serving as working references, training and inter-laboratory comparison (proficiency) testing purposes.

National Strategies and Stakeholder Engagement

The Department of Agriculture and Water Resources will continue to liaise with the OIE and other international organisations (e.g. FAO) for international diagnostic laboratory testing issues, including the development and revision of the OIE Manuals of Diagnostic Tests and Vaccines. Provision of technical and scientific input will be coordinated by the OIE National Focal Point for Veterinary Laboratories for Australia.

The task group will play a role in liaising with other stakeholders, including university, private and industry laboratory experts/bodies, to address specific laboratory topics as needed.

AHC will include laboratory-specific topics in its regular stakeholder newsletter, Vet Communique, as needed.

Aquatic Animal Health Laboratory Diagnostics

All matters relating to laboratory diagnostics for aquatic animal species will be managed by SCAAH as a subcommittee of AHC.

The new arrangements for essential laboratory functions have been implemented in a staged manner as appropriate to ensure smooth transition. The task group's activities have commenced. AHC will continue to oversee the performance of these arrangements.