

Sharing Research Data to improve animal and human health: joint statement by STAR-IDAZ partners.

Introduction

Animal diseases can cause serious social, economic and environmental damage and in some cases also threaten human health. An increasing number of the major disease problems or threats faced by the livestock industry and zoonoses are of a global nature. The aim of the Global Network on Infectious Diseases of Animals and Zoonoses is to improve coordination of research activities on the major infectious diseases of animals (including zoonoses) so as to hasten the delivery of improved control methods. This will be achieved through the establishment of an international forum of R&D programme owners and managers and international organisations to share information, improve collaboration on research activities and work towards common research agendas and coordinated research funding on the major animal diseases affecting livestock production and human health.

Generating data is expensive and time-consuming. As funders and programme managers' of this research, we believe that making research data sets available to investigators beyond the original research team in a timely and responsible manner, subject to appropriate safeguards, will generate three key benefits:

- faster progress in improving animal and human health
- better value for money
- higher quality science.

Each organisation will work within its own legal and operational framework, and we are committed to working towards these goals together. We intend to establish joint working groups where appropriate. We call on governments and other actors that generate routine animal health data (including statistics) to adopt a similar approach. Institutional and project specific data management policies and plans should be in accordance with relevant standards and community best practice. Data with acknowledged long term value should be preserved and remain accessible and usable for future research.

This Statement establishes guiding principles and desired goals. It recognises that flexibility and a variety of approaches will be needed in order to balance the rights of the individuals and communities that contribute data, the investigators that design research and collect and analyse data, and the wider scientific community that might productively use data for further research.

The joint statement of purpose

Vision

We, as funders of research and/or research programme managers, intend to work together to increase the availability to the scientific community of the research data we fund that is collected for the purpose of animal health and/or zoonoses research, and to promote the efficient use of those data to accelerate improvements in animal and public health.

Principles

Funders and research programme managers agree to promote greater access to and use of data in ways that are:

- **Equitable:** Any approach to the sharing of data should recognise and balance the needs of researchers who generate and use data, other analysts who might want to reuse those data, the livestock industries, public health authorities and funders who expect benefits to arise from research.
- **Efficient:** Any approach to data sharing should improve the quality and value of research and increase its contribution to improving animal and public health. Approaches should be proportionate and build on existing practice and reduce unnecessary duplication and competition.

Goals

While we recognise that progress may be gradual as we develop mechanisms and resources consistent with these principles, we aim to work in concert to achieve the following.

Immediate goals

- **Data management standards that support data sharing**
Standards of data management are developed, promoted and entrenched so that research data can be shared routinely, and re-used effectively.
To enable research data to be discoverable and effectively reused by others, sufficient metadata should be recorded and made openly available to enable other researchers to understand the research and re-use potential of the data. Published results should always include information on how to access the supporting data.
- **Data sharing is recognized as a professional achievement**
Funders and employers of researchers recognize data management and sharing of well-managed datasets as an important professional indicator of success in research.
- **Making research data sets available, in a timely manner, subject to appropriate safeguards**
To ensure that research teams get appropriate recognition for the effort involved in collecting and analysing data, those who undertake research work may be entitled to a limited period of privileged use of the data they have collected to enable them to publish the results of their research.
- **Secondary data users respect the rights of producers and add value to the data they use**
Researchers creating data sets for secondary analysis from shared primary data are expected to share those data sets and act with integrity and in line with good practice - giving due acknowledgement to the generators of the original data.
In order to recognise the intellectual contributions of researchers who generate, preserve and share key research datasets, all users of research data should acknowledge the sources of their data and abide by the terms and conditions under which they are accessed

Longer-term aspirations

- **Well documented data sets are available for secondary analysis**
Data collected for animal health research are made available to the scientific community for analysis which adds value to existing knowledge and which leads to improvements in animal health or a reduction in zoonotic threats to human health.
- **Capacity to manage and analyse data is strengthened**
The research community, particularly those collecting data in developing countries, develop the capacity to manage and analyse those data locally, as well as contributing to international analysis efforts.
- **Published work and data are linked and archived**
To the extent possible, datasets underpinning research papers in peer-reviewed journals are archived and made available to other researchers in a clear and transparent manner.

- Data sharing is sustainably resourced for the long term
The human and technical resources and infrastructures needed to support data management, archiving and access are developed and supported for long-term sustainability.