

Global Canine Data Alliance (GCDA)

Connecting Health, Genomic, and Clinical Insights for Better Breeding and Research

Executive Summary

The Global Canine Data Alliance (GCDA) is an international coordination initiative under the International Partnership for Dogs (IPFD) that connects organisations holding canine health, pedigree, clinical, genomic, and population-level data to enable collaborative research and evidence-based improvements in dog health and welfare.

Across the global canine sector, large volumes of valuable data already exist. These include kennel club pedigree and health screening records, veterinary organization clinical databases, genomic datasets from academic and industry research projects, and insurance-based morbidity and longevity data. Datasets are fragmented among different organisations, countries, and systems, with differing standards, identifiers, and governance models. This limits their combined use for large-scale research into disease, genetic diversity, and population health.

GCDA addresses this challenge by connecting data-holding organisations and supporting alignment of standards, interoperability, and responsible data use frameworks. Rather than being a data repository or infrastructure provider, it instead focuses on enabling collaboration and improving the discoverability and usability of existing data resources.

The long-term vision is a connected international ecosystem where canine health and genomic data can be used more effectively to support research, improve breeding decisions, and enhance dog health and welfare globally.

1. Initiative Description

The Global Canine Data Alliance (GCDA) aims to connect and coordinate existing national and international canine data resources. Key stakeholder groups include kennel clubs and breed registries, veterinary organisations and clinical data systems, academic and research institutions, genetic testing laboratories, and animal health and insurance providers. These groups hold health and pedigree databases, veterinary clinical data, genetic and genomic research datasets, insurance-based health data, etc.

Although these datasets collectively represent a major opportunity for advancing canine health research, they are currently held in separate systems with different standards, identifiers, and governance frameworks. As a result, they are rarely combined in ways that enable large-scale, cross-population analysis.

GCDA seeks to address this challenge by bringing together organisations that generate, manage, or use canine data and supporting collaboration across sectors to improve data discoverability, comparability, and responsible use.

Its role is to identify where relevant datasets exist, clarify how they are structured and governed, and support the development of compatible approaches that enable meaningful cross-study and cross-border analysis. GCDA focuses on coordination and facilitation rather than central data storage or infrastructure development.

Information about relevant datasets, initiatives, best practices, and collaboration opportunities will be shared through DogWellNet.com and related communication channels to improve visibility, coordination, and engagement across the global canine health and research community.

2. Core Priorities & Strategic Goals

The GCDA focuses on enabling coordination, alignment, and interoperability across existing canine data systems. It supports collaboration between organisations that generate and use canine data, rather than building or operating central infrastructure.

1. Global Data Mapping & Connectivity

- Catalogue existing canine data resources across kennel clubs, veterinary systems, research groups in academia and industry, genomic repositories, insurance datasets, and other networks
- Identify where phenotypic and genotypic data are generated or linked
- Document ownership, governance structures, and access conditions
- Improve visibility of existing resources to reduce fragmentation and support collaboration

2. Data Standardisation & Interoperability

- Identify differences in phenotype definitions, diagnostic systems, and breed classifications
- Promote alignment of metadata practices for health, genomic, and longitudinal datasets
- Support harmonisation of approaches for linking genomic and phenotypic data (e.g. WGS, SNP arrays, clinical records)
- Discuss adoption of interoperable dog identifiers across systems (e.g. registration, microchip, DNA identity)

3. Governance & Ethical Frameworks

- Support development of best-practice guidance for responsible data sharing under GDPR and related frameworks
- Contribute to shared understanding of consent requirements for research and clinical data use
- Encourage proportionate access models (open, controlled, or restricted) depending on data sensitivity
- Promote transparency in data stewardship and responsibilities across stakeholders

4. Research Collaboration & Data Use

- Facilitate connections between organisations and researchers working with canine health and genomic data
- Improve awareness of existing datasets and their accessibility
- Encourage sharing of derived datasets (e.g. variant annotations, EBVs, population metrics) in interoperable formats
- Support cross-border research on disease risk, genetic diversity, and population health

5. Pilot Studies & Feasibility Development

- Support design of pilot studies integrating kennel club, veterinary, and genomic datasets in selected breeds or conditions
- Explore practical approaches to data harmonisation and linkage using existing standards and infrastructure capabilities
- Identify technical and governance requirements for scalable future collaboration
- Assess realistic pathways for long-term coordination and interoperability across sectors

6. Education, Outreach & Capacity Building

- Develop educational resources on EBVs, genomic risk, inbreeding, and population genetics for breeders and veterinarians
- Provide accessible explanations and visual materials via DogWellNet.com and related channels
- Support shared understanding of data-driven breeding and research approaches
- Share examples demonstrating how integrated data improves understanding of canine health and disease

3. Vision

A connected international ecosystem in which canine health, genomic, and phenotypic data can be more effectively used to support research, breeding decisions, and improvements in dog health and welfare.

In this ecosystem:

Discoverable – Data sources can be identified across organisations and countries

Interoperable – Harmonised approaches enable comparison and potential integration of datasets

Ethically governed – Data use follows appropriate consent, privacy, and stewardship frameworks

Collaboratively usable – Researchers and data holders can work together to address shared questions in canine health and genetics

4. Planned Outcomes (2026–2027)

- Establishment of a GCDA coordination group and working structure under the IPFD framework
- Consolidation of stakeholder engagement
- Development of a structured overview of major canine data resources, including data types, access conditions, and governance models
- Identification and prioritisation of feasible use cases for cross-sector pilot studies involving linked phenotypic and genomic data
- Exploration of interoperability and harmonisation approaches in collaboration with existing data infrastructure standards and frameworks
- Development of communication channels and knowledge-sharing through DogWellNet.com to support coordination and transparency
- Initial development of educational resources supporting interpretation of genomic, health, and population-level metrics (e.g. EBVs, diversity indicators)

5. Benefits

- Improved use of existing canine health and genomic data
- Enhanced international collaboration and research efficiency
- Greater transparency and trust in canine health information
- Evidence-based breeding strategies supporting genetic diversity
- Long-term improvements in dog health and welfare globally