

SAAFE^{CRC}

AMR Data Code

Edition 1 Feb 26



AMR Data Code

Research & Funding Acknowledgements

We would like to acknowledge the time generously provided by the National Farmers Federation Farm Data Code team and all industry participants to attend and contribute to the different stages of consultation towards this report.

The project Advancing agribusiness digital transformation to prevent pathogen resistance and improve food security is a co-investment partnership through the Australian Research Data Commons (ARDC) through its Food Security Data Challenges program (DOI: 10.47486/DC104). The ARDC is enabled by the National Collaborative Research Infrastructure Strategy (NCRIS).

This work has been supported by the Solving Antimicrobial Resistance in Agribusiness, Food, and Environments Cooperative Research Centre (SAAFE CRC) whose activities are funded by the Australian Government's Cooperative Research Centre Programme.

Data Code Key Research Delivery Team:

RJ Soares Magalhães¹ & N Amin¹

¹The University of Queensland

Contents

Development of the AMR Data Code	4
How to Use	5
Data Definition under the AMR Data Code	6
AMR Data Code Principles and Standards	7
Principle 1 Control	9
Principle 2 Transparency	10
Principle 3 Security	11
Principle 4 Compliance	12
Principle 5 Portability	13
Principle 6 Fairness	14
Principle 7 Adaptability	15
Appendix I	16
Appendix II	17

This document is under development and intended as general guidance material for a wide range of sectors. Individuals should consider the risks posed by their data sharing and seek further advice if required.

The AMR Data Code is intended for use in cases of voluntary release of data. It is not intended for use in cases of regulatory or compliance data, as these may have their own legislative basis and controls, however some of the principles may still apply.

Use the AMR Data Code as a guide to augment, not supersede, your existing internal guidelines & requirements.

Development of the AMR Data Code

The AMR Data Code has been developed through a coordinated, two-stage process of consultation and co-design led by the SAAFE CRC in partnership with industry stakeholders. This Code is voluntary and focuses on circumstances where there is a direct relationship between a Data Provider and a Data Receiver involving the collection, use, or sharing of antimicrobial resistance and use (AMR/U) relevant data.

The purpose of the Code is to ensure that Data Providers have clarity and confidence in how their AMR data is collected, used, stored and shared, and to enable Data Receivers to align their data management practices with recognised best practice.

Co-design Process

The first stage of development involved an all-stakeholder workshop co-led by representatives from the National Farmers' Federation (NFF) Data Code team and researchers from The University of Queensland. This workshop assessed the suitability of the NFF Farm Data Code as the foundational blueprint for an AMR-specific Data Code tailored to the diverse needs of SAAFE CRC sectors.

The second stage comprised a series of sector-specific workshops designed to identify the risks, expectations and data governance principles most critical to address within hypothetical AMR data-sharing scenarios. Insights from these discussions were thematically analysed to determine:

- a. the types of AMR-related data that each sector considered they owned or generated; and
- b. the governance principles they considered essential to ensure safe, responsible and transparent data sharing.

A consolidated summary of these findings was then circulated to industry stakeholders for review and refinement to ensure the Code reflects sector-wide expectations and practical realities.

Benefits of the Code

For Data Providers, the Code:

- increases transparency and understanding of how Data Receivers collect, use and share AMR-related data, and
- provides a clear framework for comparing data policies and informing negotiations around data-sharing agreements that involve AMR data.

For Data Receivers, the Code:

- offers agreed guidance on responsible data management practices, and
- supports informed, trust-based engagement with Data Providers about how AMR data are accessed, used and governed.

Using the AMR Data Code

The Data Code is a set of data governance guidelines designed to enable and support high-quality, controlled, and reliable AMR research and collaboration between data providers and data receivers.

It provides a structured framework for negotiating and managing data in ways that uphold transparency, ownership, control, and fair use.

By establishing clear standards for responsible data handling, the AMR Data Code helps ensure that sensitive and cross-sectoral data, such as those related to antimicrobial resistance and use (AMR/U), can be shared and used ethically and effectively.

When to Use

Data sharing request received

Use of the AMR Data Code can be initiated at any time in association with AMR/U data sharing arrangements, e.g. an external party:

- Requests access to existing data, such as operational data
- Desires to generate new data, such as creating a new sampling regime
- Wishes to share data they already have access to with another party

Understand Scope & Objectives

Ensure the purpose of sharing the data is well understood and all the parties and touchpoints involved are identified.

Gather existing Data Sharing Agreements (DSAs)

Guided by the scope, retrieve all relevant existing data sharing agreements. Identify where agreements are missing.

Review against the Code

Work through each of the Principles and Standards outlined in the AMR Data Code to negotiate, update or create new data sharing agreements.

Data Definition under the AMR Data Code

AMR/U data refers to any data on antimicrobial resistance to, and use of, antimicrobials that relates to the operations, environment, products, inputs, outputs, or external risk factors associated with the business ("entity") that falls in the following conditions:

1. Origin of Generation

Data is considered within scope when it:

- a. Is produced or collected by the entity by its staff, contractors, consultants, equipment, or technology systems within its control or authorisation;
- b. Is created, commissioned, or authorised by the entity (i.e., enterprise-permissioned collection);
- c. Is generated as part of the delivery of services directly to the entity business operations;
- d. Is collected or produced by third parties (including researchers, government agencies, or service providers) where:
 - i. The data directly characterises the entity, its production systems, its environmental conditions, or its exposure to external environmental, chemical, microbial, or biological risks; or
 - i. The data is derived from biological, physical, or digital samples that originate from within the entity's boundary or from its immediate environmental interface (e.g. water sources, atmospheric monitoring, catchment runoff, or shared infrastructure inputs such as irrigation water, stormwater, or processing streams).

2. Data Types Covered

The definition includes raw, processed, aggregated, derived, modelled, and synthetic data, as well as research data that has direct attribution to the entity, its systems, or entity-relevant environmental interfaces. This encompasses, but is not limited to:

- a. Production data (e.g., yield, input use, productivity metrics)
- b. Operational and machinery data
- c. Environmental data (soil, air, water, biodiversity, climate, runoff)
- d. Sensor and remote sensing data (including satellite-derived data where directly applied to entity areas or used to characterise entity performance or risk exposure)
- e. Risk and compliance data (e.g., residue levels, antimicrobial resistance, pathogen monitoring, pest surveillance)
- f. Transactional, financial, and market data
- g. Genomic, microbial, and chemical data from biological samples or environmental sampling that inform entity exposure or risk assessment
- h. Supply chain and traceability data directly linked to entity operations.

3. Scope of Entity Interface

The scope includes both within and proximate off-premise interfaces (periphery zones, supply and discharge systems, shared catchments, and immediate ecological interfaces) where the data reflects potential entity exposures, liabilities, regulatory obligations, or operational risks.

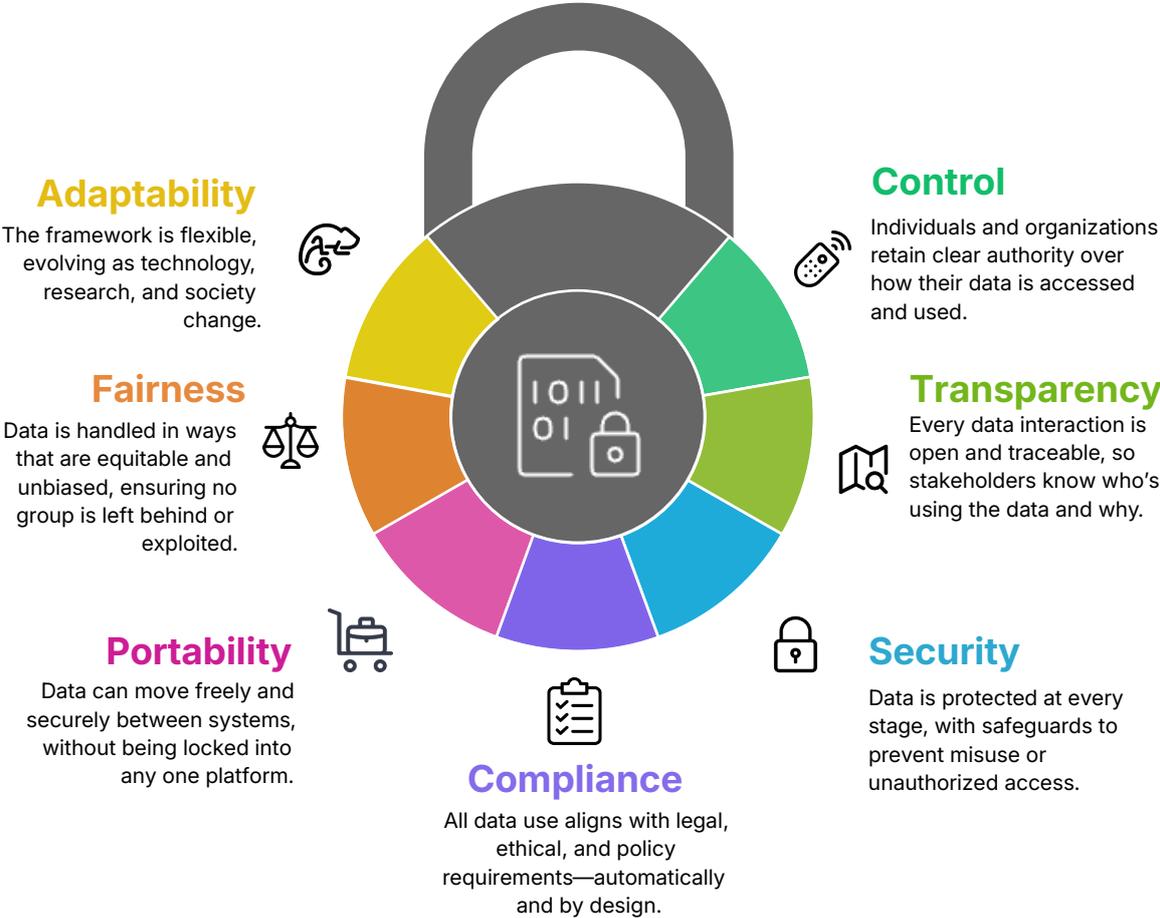
4. Exclusions

Purely public domain datasets that are non-specific to the entity (e.g., national weather forecasts, general market prices or risks) and non-voluntary data: Data collected under legislative or regulatory enforcement activities, unless directly integrated or applied to the entity's management systems. Principles may still be relevant for consideration by stakeholders.

AMR Data Code Principles and Standards

What is the AMR Data Code?

The AMR Data Code provides a principles framework to ensure AMR/U data is managed securely, ethically, and with long term integrity.



The Advancing Agribusiness: Digital Transformation to Prevent Pathogen Resistance and Improve Food Security project received investment [DOI: [10.47486/DC104](https://doi.org/10.47486/DC104)] from the ARDC. The ARDC is enabled by NCRIS.

Figure 1 AMR Data Code Principles and Definitions

The AMR Data Code Framework upholds the following Principles:

- Control
- Transparency
- Security
- Compliance
- Portability
- Fairness
- Adaptability

Principle 1 Control

Establishes a transparent, controlled, and secure foundation for AMR data governance

Standard 1: Explicit Ownership & Tiered Access Custodianship Declaration

This standard requires clear documentation of who owns, controls and holds custodial responsibility for data across its lifecycle, enabling Data Providers to classify data, set use limitations and define access tiers.

Good Practice Guidance:

- **Clarify ownership and custodianship** of all primary and derived data, including data generated through third-party services or purchased datasets.
- **Specify permitted uses and restrictions** for operational, residue, genomic or other AMR-relevant data, including limitations on downstream sharing, resale or reuse.
- **Define access tiers and approval pathways** so Data Providers and Data Receivers can manage how the data is handled at every stage.

Standard 2: Contractual Control & Data Licensing Standards

This standard ensures that data permissions are formally embedded through standardised agreements, ranging from commercial licensing arrangements to research-focused instruments such as Materials Transfer Agreements (MTAs), that define permitted uses, access duration, resale rights and compensation models.

Good Practice Guidance:

- **Use standardised contracts or MTAs** to formally outline permissible uses, time-limits and any commercial or non-commercial conditions.
- **Define licensing or leasing terms** that allow controlled access while ensuring Data Providers retain ultimate decision-making authority.
- **Specify compensation or cost-recovery models** where relevant, such as revenue sharing or fee-for-service access.

Standard 3: Traceable Data Sharing

This standard mandates the use of robust security controls, audit trails, encryption and non-disclosure obligations to ensure all data transfers are accountable and transparent, whether technology-enabled or supported through written agreements such as non-disclosure agreements (NDAs).

Good Practice Guidance:

- **Implement audit trails and access logs** to ensure every data access or download event is recorded.
- **Apply encryption and secure transfer protocols** to protect sensitive data at all stages.
- **Use NDAs or equivalent agreements** to formally limit unauthorised disclosure and ensure all users uphold confidentiality obligations.
- **Ensure data assets remain traceable** throughout their lifecycle, for example by assigning persistent identifiers (e.g., DOIs) to each shared dataset.

Principle 2 Transparency

Ensures that AMR data sharing is transparent, purposeful and accountable for all parties involved

Standard 1: Disclosure of Purpose and Intended Use

All data access requests must include a detailed, upfront disclosure of why the data is being requested, how it will be used, who will have access to it, and how results will be reported.

Good Practice Guidance:

- **Require full disclosure** of the purpose, methodology, intended outputs and reporting pathways before granting access to any AMR-related data.
- **Ensure Data Providers understand how their data will be used** by clearly outlining analytical methods, expected outcomes, and any intended external dissemination.
- **Identify all parties who will access the data**, including research teams, subcontractors or downstream collaborators, and document their roles and responsibilities.
- **Provide clear reporting expectations** so Data Providers know when, how and in what form findings will be communicated.

Standard 2: Transparent Access Permissions and Auditability

Maintain accessible records of who has been granted access to which data, under what terms, and for what timeframes, and enable compliance auditing against permitted-use agreements.

Good Practice Guidance:

- **Maintain an up-to-date register of data access permissions** that documents who accessed the data, under what conditions, and for how long.
- **Enable Data Providers to audit access logs** to confirm compliance with approved purposes and detect any unauthorised or secondary use.
- **Provide visibility over downstream access**, ensuring that sensitive operational, proprietary or public health related data is not shared beyond agreed parties.
- **Embed mechanisms that enforce agreement boundaries**, such as time-limited access, revocation procedures or automated audits.

Standard 3: Feedback of AMR/U Research Findings

Research outputs that rely on shared data must be reported back to Data Providers, including summaries of key findings, implications, and any risks or benefits identified.

Good Practice Guidance:

- **Provide regular, accessible updates to Data Providers** on analysis progress and emerging findings relevant to their operations or risk context.
- **Summarise key insights and implications** (e.g., emerging resistance patterns, AMR risks, management opportunities) using language and formats suited to each sector.
- **Ensure time-sensitive findings are communicated promptly**, particularly where results may influence food safety, public health, regulatory compliance or monitoring activities.
- **Support ongoing collaboration** by offering Data Providers opportunities to discuss findings, ask questions and influence next steps.

Principle 3 Security

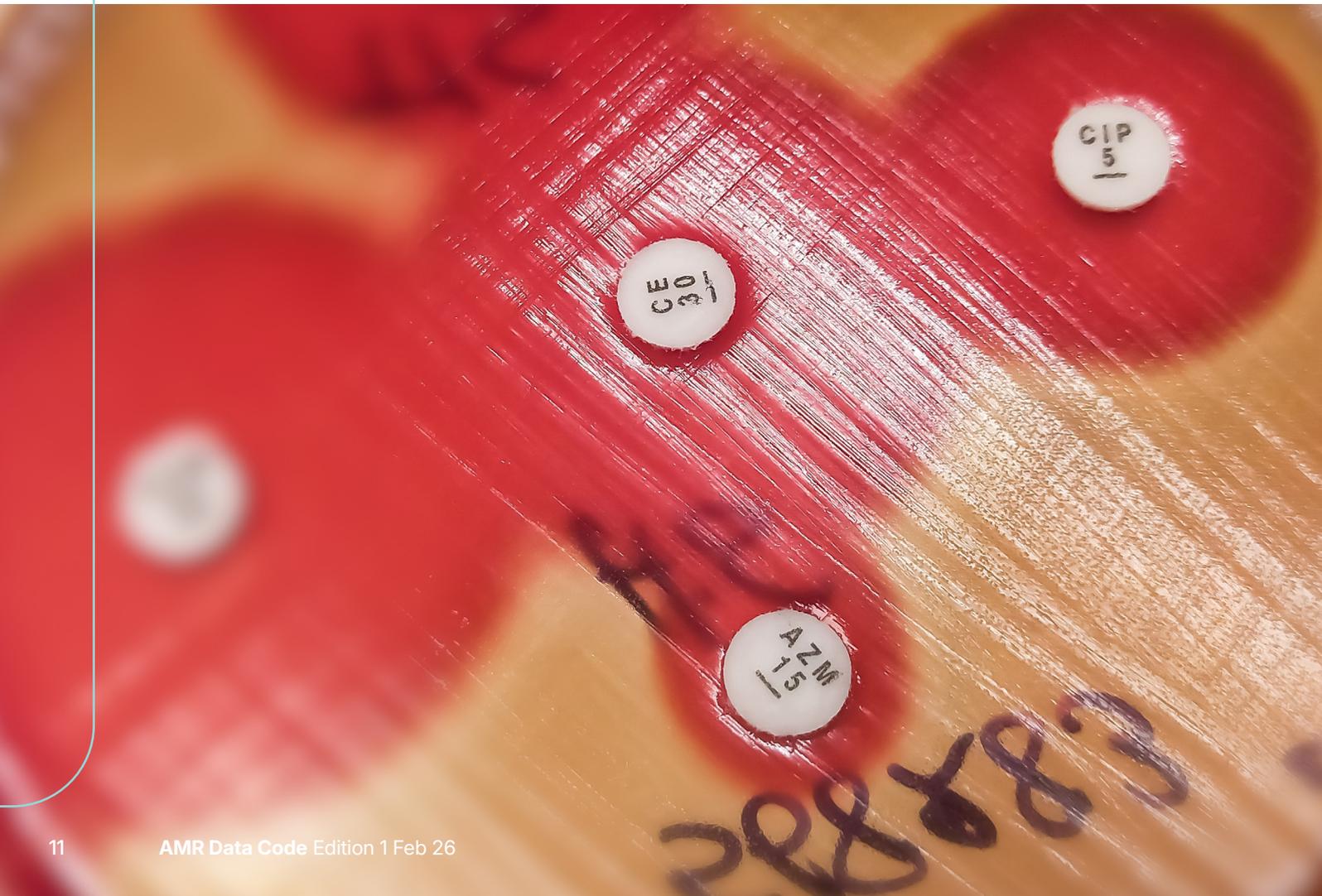
Ensures that AMR data is exchanged, stored and accessed in a manner that is protected, controlled and resilient

Standard 1: Secure Platform & Data Sharing Infrastructure

All data exchanges should occur through certified, encrypted, access-controlled digital platforms that comply with recognised cyber security standards (e.g., ISO 27001, Essential Eight, SOCI compliance).

Good Practice Guidance:

- **Use encrypted, access-controlled systems** for sharing operational, sample or AMR data, avoiding insecure transfer methods such as email or unprotected cloud storage.
- **Host sensitive data within secure environments** under the Data Provider's control when appropriate, ensuring alignment with critical infrastructure security frameworks.
- **Apply recognised cybersecurity standards** across all data handling processes, including multi-factor authentication, intrusion detection systems, and verified access permissions.
- **Ensure secure storage and transfer protocols** for highly sensitive datasets such as SCADA data, GIS network maps, treatment system configurations or genomic surveillance files.



Principle 4 Compliance

Ensures that AMR data collection, sharing and analysis operate within legal, ethical and regulatory boundaries

Standard 1: Mandatory Legal & Regulatory Compliance Alignment

All data users must demonstrate that data collection, storage and usage fully comply with all applicable local, national, and international laws, regulations, and sector standards.

Good Practice Guidance:

- **Ensure alignment with sector-specific legislation**, including environmental protection laws, public health reporting, food safety standards, and SOCI Act requirements.
- **Embed compliance checks into project workflows** to ensure that data use does not unintentionally breach statutory or licensing obligations.

Standard 2: Ethical and Responsible Use Compliance

All data users should adhere to ethical standards when managing and interpreting data, including requirements for transparency, fairness, accuracy and minimising risk of harm.

Good Practice Guidance:

- **Interpret data accurately and transparently** to avoid misrepresentation, over-statement of risk or misleading conclusions.
- **Prevent improper commercial exploitation of sensitive data**, including constraints on resale or competitive misuse.
- **Safeguard Data Providers from reputational harm** by avoiding disclosure of data in ways that could affect trade, market access or public perception.
- **Ensure public health and environmental data is not misused** in ways that generate unfounded fear, political controversy or misaligned public discourse.

Standard 3: De-identification of Sites and Sensitive Locations

All AMR/U data shared, published, or released outside the originating project team should be de-identified to remove or obscure information that could reasonably enable the identification of specific sites, facilities, utilities, farms, catchments, or operational locations, unless explicit written approval for site identification has been provided by the Data Provider.

Good Practice Guidance Bullets:

- **Apply de-identification or aggregation of site-specific identifiers** (e.g. facility names, precise locations, maps or network details) in all shared datasets, publications and public repository submissions, unless explicit permission for site identification has been granted by the Data Provider.
- **Assess and manage re-identification risk prior to external release**, including through indirect identifiers, metadata, figures or contextual information that could reasonably enable site identification.
- **Document any approvals for site identification** within the relevant data sharing agreement (e.g. MTA or DSA), including scope, duration and permitted forms of disclosure.

Principle 5 Portability

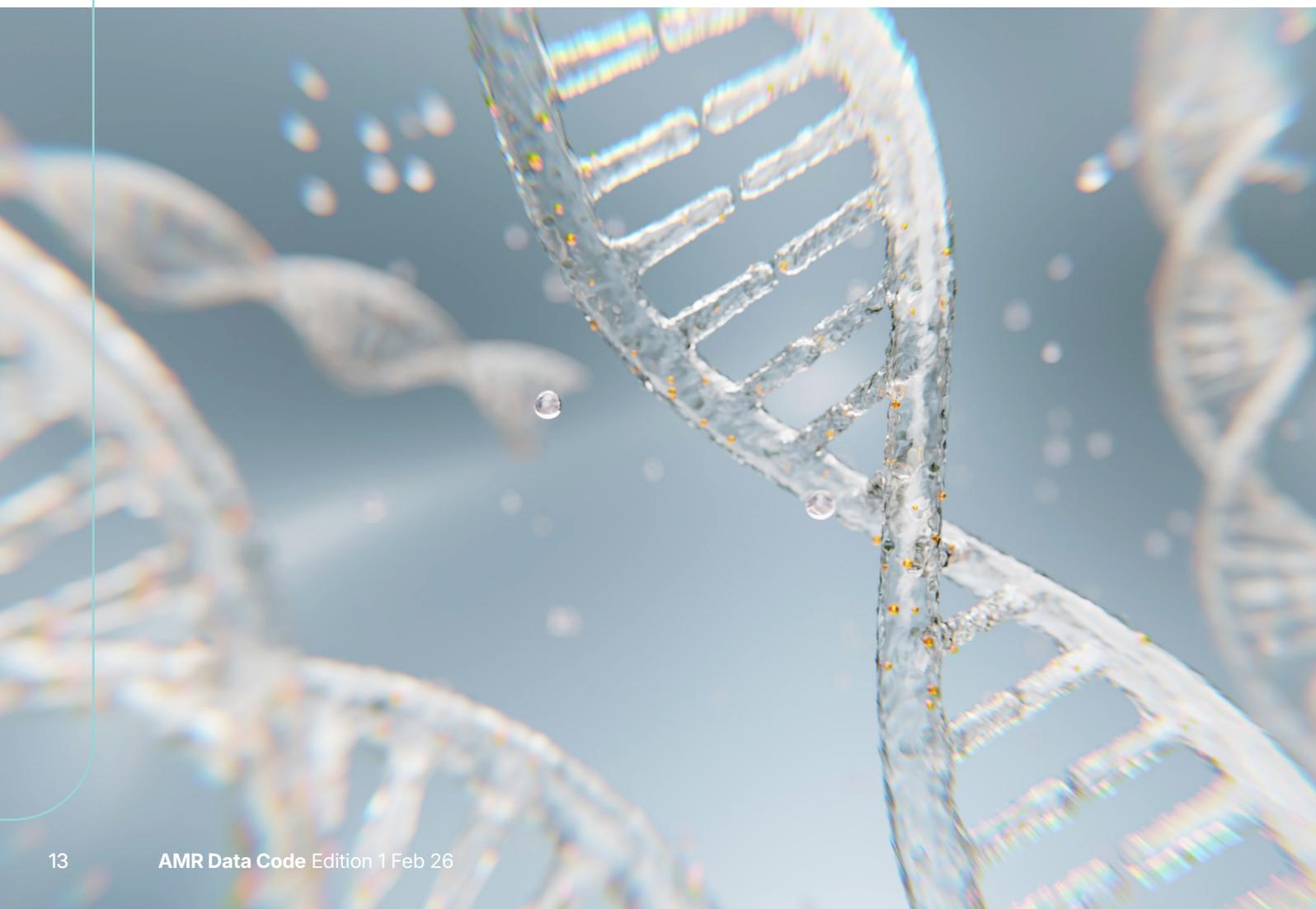
Ensures that AMR-related data can move across systems, organisations and regulatory frameworks without loss of meaning, integrity or security.

Standard 1: Adoption of Interoperable Data Standards

Data should be stored and managed using interoperable, widely adopted technical standards to facilitate transfer across systems without loss of integrity, context or security.

Good Practice Guidance:

- **Adopt common technical formats and metadata standards** to support seamless exchange of production, residue, genomic and AMR surveillance data.
- **Use interoperable systems** that enable movement of monitoring, compliance or surveillance datasets between industry partners, regulators, researchers and national reporting systems.
- **Minimise risky or costly reformatting**, ensuring data can move without manual restructuring or introduction of errors.
- **Apply consistent data dictionaries and schemas** to preserve context and interpretability across all receiving platforms.



Principle 6 Fairness

Ensures that AMR data governance is transparent, equitable and respectful of the contributions made by data providers.

Standard 1: Equitable Access and Non-Discriminatory Use Framework

Data governance frameworks should actively promote fairness, transparency and accountability by ensuring that access to AMR/U data is granted through clear, principle-based approval processes guided by Control, Transparency and Fairness.

Good Practice Guidance:

- **Apply a consistent, principle-based approval process** to every data access request, ensuring all applicants, regardless of size, influence, or sector, are treated equally.
- **Require applicants to disclose** intended use, access duration and reporting pathways before approval is considered.
- **Assess requests against the Code's principles** (Control, Transparency, Fairness) to ensure ethical, secure and appropriate use of AMR/U data.
- **Provide written data-sharing agreements** that define permitted uses, conditions, traceability expectations and feedback obligations where access is approved.
- **Empower all Data Providers**, including smaller entities, to make informed decisions about sharing their data on equal terms with larger organisations.

Standard 2: Benefit Sharing and Compensation Models

Data governance frameworks should include mechanisms that ensure Data Providers share in the value created through downstream use of their data, including both financial and non-financial benefits.

Good Practice Guidance:

- **Articulate clear benefit-sharing models**, including financial mechanisms (e.g., cost-recovery, compensation, licensing) and non-financial benefits (e.g., benchmarking reports, risk insights, decision tools) linked to contributions and levels of downstream value.
- **Return actionable insights** to Data Providers whenever their data underpins scientific, regulatory or market outcomes.
- **Enable Data Providers to negotiate terms**, ensuring equitable participation in value creation.

Standard 3: Transparency of Use, Attribution, and Acknowledgment

All data users must disclose how data will be used, ensure proper attribution to original data providers, and transparently acknowledge data sources in research, policy, or commercial outputs.

Good Practice Guidance:

- **Recognise Data Providers by default** in research outputs, policy documents, certification schemes and regulatory reports where their data contributed to findings (if in alignment with confidentiality / NDA agreements), ensuring attribution is visible and accurate.
- **Maintain open disclosure of data sources**, enabling traceability and reinforcing trust in the integrity of analyses and reporting.
- **Apply consistent citation and acknowledgment formats** across all outputs.

Principle 7 Adaptability

Ensures that AMR data governance remains responsive to evolving risks, technologies and regulatory landscapes.

Standard 1: Context-Aware Consent management

Implement dynamic consent models that allow Data Providers and researchers to pre-authorise specific future uses of AMR/U data under defined triggers, including rapid release of data for high-risk events or cross-sector response needs.

Good Practice Guidance:

- **Use dynamic consent processes** that allow pre-approved sharing when defined triggers (e.g., outbreak detection, trade issues, policy shifts) are activated.
- **Enable time-limited, auditable release of data** for urgent decision-making while maintaining provider control.
- **Document acceptable future-use scenarios clearly**, so Data Providers understand which events may trigger automated or expedited sharing.
- **Support rapid response workflows** across veterinary, food safety, human health and environmental sectors when emerging One Health risks arise.

Standard 2: Tiered Sensitivity Classification

Apply multi-level classification to distinguish AMR/U data by risk level, allowing more flexible use for low-risk datasets and stronger protections for sensitive or identifiable datasets.

Good Practice Guidance:

- **Classify AMR/U data into sensitivity tiers and apply corresponding access controls**, enabling broad sharing of low-risk, aggregated datasets while ensuring enhanced protections and restricted permissions for high-risk or commercially sensitive information, thereby maintaining flexibility without compromising regulatory, market or reputational safeguards.

Standard 3: Sunset and Review of Clauses for Data Sharing Agreements

Require periodic review and revision of AMR/U data sharing agreements to account for evolving science, new data types, and emerging regulatory or trade requirements.

Good Practice Guidance:

- **Review data-sharing agreements at defined intervals and update them** to reflect new technologies, emerging resistance targets, evolving international frameworks (e.g., WHO GLASS, Codex, WOH) and changing regulatory or reporting obligations, ensuring governance arrangements remain current, adaptive and fit for purpose.

Appendix I

Table 1. **Data Provider AMR Data Code Good Practice Checklist for the Development of Data Sharing Agreements**

P = Principle

	Practices	User	Included? (Yes, No, N/A)
P1	Clarify ownership	Data Provider	
	Specify permitted uses / restrict	Data Provider	
	Define access tiers and approval pathways	Data Provider	
	Use contracts or MTAs	Data Provider	
	Define licensing or leasing terms	Data Provider	
	Specify cost-recovery models	Data Provider	
	Implement audit trails	Data Provider	
	Apply Encryption / transfer protocols	Data Provider	
	Use NDAs or equivalent	Data Provider	
P2	Require full disclosure	Data Provider	
	Provide clear reporting expectations	Data Provider	
	Maintain an up-to-date register of data access permissions	Data Provider	
	Embed Mechanisms that enforce agreement boundaries	Data Provider	
P3	Use encrypted, access-controlled systems	Data Provider	
	Host sensitive data within secure environments	Data Provider	
	Apply recognised cybersecurity standards	Data Provider	
	Ensure secure storage and transfer protocols	Data Provider	
P4	Ensure alignment with sector-specific legislation	Data Provider	
	Document approvals required for site identification	Data Provider	
	Assess and manage site identification risk prior to research release	Data Provider	
P5	Adopt common technical formats and metadata standards	Data Provider	
	Use interoperable systems	Data Provider	
P6	Apply a consistent, principle-based approval process	Data Provider	
	Require applicants to disclose intended use	Data Provider	
	Assess requests against the Code's principles	Data Provider	
	Provide written data-sharing agreements	Data Provider	
P7	Use dynamic consent processes	Data Provider	
	Enable time-limited, auditable release of data	Data Provider	
	Support rapid response workflows	Data Provider	
	Classify AMR/U data into sensitivity tiers and apply corresponding access controls	Data Provider	
	Review data-sharing agreements at defined intervals and update	Data Provider	

Appendix II

Table 2. **Data Receiver** AMR Data Code Good Practice Checklist for the Development of Data Sharing Agreements

P = Principle

Principle number	Practices	User	Included? (Yes, No, N/A)
P1	Implement audit trails	Data Receiver	
	Apply Encryption / transfer protocols	Data Receiver	
	Ensure Data assets are traceable	Data Receiver	
P2	Ensure data providers understand how their data will be used	Data Receiver	
	Identify all parties who will access the data	Data Receiver	
	Maintain an up-to-date register of data access permissions	Data Receiver	
	Enable data providers to audit access logs	Data Receiver	
	Provide visibility over downstream access	Data Receiver	
	Provide regular, accessible, updates to data providers	Data Receiver	
	Summarise key insights and implications to providers	Data Receiver	
	Ensure time-sensitive findings are communicated promptly	Data Receiver	
Support ongoing collaboration	Data Receiver		
P3	Use encrypted, access-controlled systems	Data Receiver	
	Host sensitive data within secure environments	Data Receiver	
	Apply recognised cybersecurity standards	Data Receiver	
P4	Ensure alignment with sector-specific legislation	Data Receiver	
	Embed compliance checks into project workflows	Data Receiver	
	Interpret data accurately and transparently	Data Receiver	
	Prevent improper commercial exploitation of sensitive data	Data Receiver	
	Safeguard Data Providers from reputational harm	Data Receiver	
	Ensure public health and environmental data is not misused	Data Receiver	
P5	Adopt common technical formats and metadata standards	Data Receiver	
	Use interoperable systems	Data Receiver	
	Minimise risky or costly reformatting	Data Receiver	
	Apply consistent data dictionaries and schemas	Data Receiver	
P6	Empower all Data Providers to negotiate terms	Data Receiver	
	Articulate clear benefit-sharing models	Data Receiver	
	Return actionable insights to Data Providers	Data Receiver	
	Enable Data Providers to negotiate terms	Data Receiver	
	Recognise Data Providers by default	Data Receiver	
	Maintain open disclosure of data sources to Providers	Data Receiver	
	Apply consistent citation and acknowledgment formats	Data Receiver	
P7	Document acceptable future-use scenarios clearly	Data Receiver	

Disclaimer

This publication is produced by Australia's Cooperative Research Centre for Solving Antimicrobial Resistance (AMR) in Agribusiness, Food and Environments (SAAFE CRC) which is owned and operated by SAAFE Limited.

SAAFE CRC is supported through funding from the Australian Government as well as contributions from valued research and industry partners. We gratefully acknowledge the support of our funding partners, whose contributions have enabled the research and development presented in this work. The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of the Australian Government or any other funding bodies.

The information contained in this publication is general in nature. While every effort has been made to ensure the accuracy and reliability of the information contained herein, SAAFE CRC makes no warranties or representations, express or implied, about the completeness, correctness, or suitability of the information for any particular purpose.

SAAFE CRC (which includes employees, consultants, affiliated staff and students of SAAFE Limited) and the authors or contributors of this publication expressly disclaim, to the maximum extent permitted by law, all responsibility for any loss, damage or consequences arising directly

or indirectly from any act or omission made in reliance on the contents of this publication. This disclaimer applies regardless of whether such loss or damage was caused by negligence on the part of SAAFE CRC or any of its associated individuals.

This research has been conducted in accordance with the principles of the Australian Code for the Responsible Conduct of Research, ensuring integrity, rigour, and ethical standards throughout the research process. The authors declare no conflict of interest in relation to this research and its publication.

© 2025 SAAFE Limited. This publication is protected by copyright.

This work is licensed under a Creative Commons Attribution Non-Commercial 4.0 International Licence (CC BY-NC 4.0). You are free to share and adapt the material for non-commercial purposes provided that appropriate credit is given, a link to the licence is provided and any changes made are indicated. Commercial use of this material is not permitted without prior written permission of SAAFE CRC. Requests and enquiries relating to rights and reproduction of this work should be addressed to team@crsaafe.com.au

Please direct any feedback on the AMR Data Code to SAAFE CRC via <https://www.crsaafe.com.au/> contact, or your SAAFE CRC contact.

SAAFE^{CRC}

www.crcsaafe.com.au
enquiries@crcsaafe.com.au
+61 8 8302 3617
PO BOX 66, Pooraka 5095



Australian Government
Department of Industry,
Science and Resources

**Cooperative Research
Centres Program**

This project is supported by the Australian Government
Department of Industry, Science and Resources through
the Cooperative Research Centres Program.