



VETERINARY MEDICINES DIRECTORATE

DISASTER RECOVERY POLICY



Vision

To be the a leading and globally recognized regulatory agency for veterinary medicines, vaccines, and animal health technologies

Mission

To safeguard animal health, human health, and the environment and promote animal welfare by assuring the quality, safety, and effectiveness of veterinary medicines, vaccines, and other animal health technologies.

Core Values

- Professionalism
- Integrity
- Transparency and accountability
- Innovativeness
- Teamwork
- Inclusivity

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1.0 Context and Mandate

The Veterinary Medicines Directorate (VMD) is the statutory regulator charged with safeguarding animal, human, and environmental health by overseeing the manufacture, importation, exportation, registration, distribution, prescription, and dispensing of veterinary medicines, biologicals, feed additives, pesticides, and related animal-health technologies in Kenya. Its mandate extends to licensing veterinary pharmacies, certifying manufacturing plants, performing pharmacovigilance, inspecting border points, and managing laboratory quality-control testing.

Given the criticality of these functions to food safety, public health, regional trade, and the national economy, any prolonged disruption can have far-reaching consequences such as drug shortages, increased antimicrobial resistance, trade embargoes, and erosion of public confidence. This policy therefore establishes a robust Disaster Recovery (DR) framework tailored to VMD's unique regulatory environment, ICT ecosystem (ERP, e-Citizen portal, Trade Facilitation Platform [TFP], pharmacovigilance database, laboratory information systems), and geographically distributed inspection and surveillance operations.

2.0 Purpose and Objectives

The purpose of this policy is to provide a systematic approach for preparing, responding to, and recovering from any event that disrupts VMD's critical services.

Specific objectives are to:

- (i) Protect human and animal health by ensuring uninterrupted regulation and surveillance of veterinary medicines.
- (ii) Minimize operational downtime and data loss through clearly defined Recovery Time Objectives (RTOs) and Recovery Point Objectives (RPOs).
- (iii) Safeguard confidential data, samples, and records integral to regulatory decisions.

- (iv) Uphold statutory obligations under the Veterinary Surgeons and Veterinary Paraprofessionals Act, 2011; VMD Regulations 2015; Mwongozo Code; Kenya Data Protection Act 2019; and ISO/IEC 27001.
- (v) Provide assurance to stakeholders—farmers, veterinarians, importers, development partners, and the public—that VMD can sustain its mandate in the face of cyber-attacks, natural disasters, pandemics, or critical infrastructure failures.

3.0 Scope

This policy applies to all VMD personnel (permanent, contract, interns, and secondees), assets (data, ICT systems, laboratories, vehicles, and physical facilities), and third-party service providers that support core processes. It covers disruptive events including but not limited to:

- (i) Cyber-incidents (malware, ransomware, denial-of-service, data breaches).
- (ii) Natural hazards (floods, fire, earthquakes, extreme weather).
- (iii) Technological failures (power outages, hardware malfunction, telecom failures, water damage).
- (iv) Human-induced events (terrorism, civil unrest, sabotage, pandemic-related staff shortages).
- (v) Supply-chain disruptions affecting reagent availability or border-inspection capability.

4.0 Policy Statements

- 4.1 VMD shall maintain a regularly updated Disaster Recovery Plan (DRP) that aligns with this policy, ISO 22301 Business Continuity Management, and the National Disaster Management Policy.
- 4.2 Critical regulatory data must be backed up daily, encrypted in transit and at rest, and replicated to an off-site or cloud location in a separate seismic zone.
- 4.3 No system shall go live without documented RTO and RPO values, an approved backup schedule, and tested restoration procedures.

- 4.4 All staff shall receive annual DR awareness training; key response personnel shall participate in semi-annual simulation exercises.
- 4.5 Successive layers of redundancy—people, systems, facilities—shall be built into laboratory testing, licencing, and border inspection operations to ensure continuity even when one layer fails.
- 4.6 The DRP and this policy shall be audited at least once every 12 months and after any major incident.

5.0 Governance and Responsibilities

Effective recovery depends on clearly defined roles:

- 5.1 Chief Executive Officer (CEO): Provides strategic leadership, declares a disaster, mobilizes resources, and interfaces with the State Department for Livestock Development and National Disaster Operations Centre.
- 5.2 Disaster Recovery Steering Committee (DRSC): Comprises all Directorate heads, Chaired by the CEO. Endorses the DR budget, reviews test results, and approves policy updates.
- 5.3 Disaster Recovery Coordinator (DRC): ICT Manager by default; ensures plan maintenance, coordinates response teams, and provides incident reports.
- 5.4 ICT Response Team (ICT-RT): Manages data backup, system restoration, cybersecurity containment, and coordinates with the Communication Authority's National KE-CERT/CC.
- 5.5 Laboratory Continuity Team (Lab-CT): Safeguards reference standards, cultures, reagents, and ensures Quality Control Lab operations are relocated to the alternate testing site within 12 hours.
- 5.6 Inspection & Surveillance Team (IST): Maintains border-point operations, reroutes import permit processing via satellite offices, and communicates with Kenya Revenue Authority and KENTRADE.
- 5.7 Communications Liaison: Public Relations Officer who disseminates timely, accurate updates to staff, licensees, media, and international partners (WAOH, FAO, AU-IBAR).

5.8 All Staff: Follow evacuation orders, protect information assets, and report incidents promptly.

6.0 Risk Landscape and Business Impact Analysis

6.1 A biennial risk assessment shall classify threats by likelihood and impact on VMD's Key Result Areas.

6.2 The Business Impact Analysis (BIA) identifies the maximum tolerable outage (MTO) for each critical function:

- (i) Licensing, Registration & Standards System – MTO 24 hrs; RTO 6 hrs; RPO 30 min.
- (ii) Pharmacovigilance & Adverse-Event Reporting – MTO 48 hrs; RTO 8 hrs; RPO 2 hrs.
- (iii) Import/Export Permit Processing (TFP/e-Citizen) – MTO 12 hrs; RTO 4 hrs; RPO 15 min.
- (iv) Quality-Control Laboratory Testing – MTO 72 hrs; RTO 24 hrs; RPO 4 hrs
- (v) ERP & Finance (AIA revenue) – MTO 24 hrs; RTO 6 hrs; RPO 2 hrs

These metrics drive prioritization of recovery resources and sequencing.

7.0 Recovery Strategy and Phases

VMD adopts a three-phase recovery approach:

7.1 Response (0–4 hrs): Activate DRSC, secure life and assets, isolate affected systems, initiate manual permit logs.

7.2 Resumption (4–24 hrs): Restore top-tier applications from replicated virtual environments; switch telephony to backup VoIP lines; re-route border inspection data to alternate regional office.

7.3 Restoration (24 hrs–7 days): Return operations to primary site, perform root-cause analysis, replenish stocks, and update the DRP with lessons learned.

8.0 Data Protection, Backup & Redundancy

- 8.1 Daily incremental and weekly full backups of databases, document management repositories, and laboratory instrument data shall be encrypted (AES-256) and stored in the Government Cloud with a secondary copy at a certified Tier III data centre located far away (e.g. 300Kms).
- 8.2 High-availability clusters and automatic failover shall protect virtual machines hosting ERP, licensing portals and email.
- 8.3 Critical laboratory equipment shall have dual-power feeds, UPS, and standby generators capable of 48 hours' runtime.

9.0 Communication and Stakeholder Engagement

Timely, transparent communication is essential to preserve public trust:

- 9.1 Internal Alerts: SMS and email via the ERP notification module within 30 minutes of incident confirmation.
- 9.2 External Notices: Website banner, social media, and press release within 2 hours, indicating services affected and expected restoration timelines.
- 9.3 Regulatory Partners: Formal notice to Pharmacy and Poisons Board, KEBS, NEMA, and WOHAI within 4 hours.
- 9.4 Hotline: A toll-free number shall be redirected to the alternate call centre for stakeholder enquiries.

10.0 Training, Testing and Continuous Improvement

- 10.1 Training: Mandatory e-learning modules on DR fundamentals for all staff annually; specialized workshops for the ICT-RT, Lab-CT, and IST.
- 10.2 Testing: Combination of quarterly tabletop exercises, semi-annual technical failover tests, and an annual full-scale simulation involving evacuation and alternate-site relocation.

10.3 Continuous Improvement: Post-exercise reviews and post-incident investigations will generate corrective actions, tracked by the DR Coordinator until closure.

11.0 Compliance, Audit and Review

11.1 The Internal Audit & Risk Assurance Division shall audit DR controls against ISO 22301 and ISO/IEC 27001.

11.2 Non-conformities shall be reported to the Audit, Risk and Compliance Committee with remediation deadlines.

12.0 Revision

This policy will be reviewed every 12 months or following any significant organizational or technological change.

APPROVED 25th BY THE BOARD ON THIS
DATE.....of..... 2025

SIGNED BY	SIGNATURE
CHIEF EXECUTIVE OFFICER	<u>[Signature]</u>
BOARD CHAIRPERSON	<u>[Signature]</u>