

Supplementary Table 1. Standardized surveillance quality audit scorecard (locally known as "Kartaun Pontuasaun")

Used for evaluating the performance of community health center surveillance systems in Manufahi Municipality, Timor-Leste. Scorecard dimensions are benchmarked against national epidemiological standards, enabling structured quarterly audits to evaluate report timeliness, documentation completeness, classification accuracy, and veterinary-epidemiological integration.

Audit dimension	Specific indicator	Performance standard & target	Method / verification source	Target score (0-2)
Timeliness of weekly surveillance reporting	Weekly Epidemiological Surveillance Submission	100% of weekly reports submitted via SMS/WhatsApp to the Municipal Surveillance Officer by Monday 12:00 PM, scheduled per the national epidemiological calendar.	Cross-verify the submission date/time logs in the Municipal SMS/WhatsApp server against the facility weekly submission log.	2: 100% on-time 1: 80%-99% on-time 0: <80% on-time
Timeliness of monthly reporting	Monthly Reporting Format Submission	100% of monthly aggregate surveillance booklets submitted to the Municipal Health Service between the 5th and 6th day of each calendar month.	Verify receipt dates recorded in the Municipal Health Service registry book against the dates on physical facility reports.	2: Submitted 5th-6th 1: Submitted after 6th but before 10th 0: Submitted after 10th
Timeliness of outbreak & event-based notification	Suspected Outbreak/Event Reporting (24-Hour Protocol)	Notification of any suspected rabies cases or clusters of severe animal bites to the municipal surveillance officer within 24 hours of case detection.	Cross-verify clinical register logs (date of presentation) against SMS/phone logs received by the municipal surveillance officer.	2: 100% notified in 24h 1: Delayed notification (24-72h) 0: Over 72h or unnotified
Completeness of outpatient registries	Registry Document Completeness (Animal Bite Book)	All core clinical and epidemiological variables in the outpatient and animal bite registration books must be fully completed with zero blank cells.	Physical audit of 100% of dog bite patient records in registration books to verify variables: Age, Sex, Address, Date of Bite, Exposure Risk Category, and ARV/RIG doses.	2: 100% complete 1: Minor blanks (<10% fields) 0: Incomplete (>10% fields)
Completeness of laboratory register books	Laboratory Specimen Register Completeness	For any suspected rabid animal euthanized/captured, the clinical specimen submission register must record animal vaccination history and source location.	Physical audit of laboratory registration logs and cross-match with clinical registers to verify that animal status fields are completed.	2: 100% logs complete 1: Missing some history 0: No animal data recorded
Accuracy of exposure category classification	WHO Rabies Exposure Category Compliance	100% alignment of documented wound exposure severity categories (Category I: Low, Category II: Moderate, Category III: High) with official WHO guidelines.	Clinical review of a sample of dog bite registry records to cross-examine patient wound description against assigned exposure category.	2: 100% clinical alignment 1: Minor errors (<5% cases) 0: Over 5% misclassified
Accuracy of PEP treatment alignment	ARV/RIG Administration Protocol Adherence	First-dose Post-Exposure Prophylaxis (PEP) matches exposure severity (ARV for Categories II & III; RIG for Category III cases with transdermal/bleeding wounds).	Cross-verify patient registers to check if Category III patients received RIG and Category II/III received ARV within recommended timeframes.	2: 100% protocol match 1: Minor discrepancies 0: Protocol violations
Integration of human-animal health	Veterinary-Epidemiological Investigation Joint Notification	Immediate notification to local municipal animal health/ veterinary services regarding any dog bite incident to prevent immediate animal euthanasia and secure 10-day observation.	Check for documented veterinary follow-up or joint communication records for reported biting incidents in the clinical register or municipal file.	2: Joint protocol active 1: Notification only, no follow-up 0: No veterinary contact
Community awareness & reporting sensitivity	Active Community Health Surveillance	Facilities document community communication activities and review baseline passive surveillance numbers to estimate community under-reporting (target of capturing estimated cases).	Review of community health education logs and comparing actual facility presentations against historical municipal attack rates.	2: Active outreach & review 1: Outreach done, no data review 0: Passive only, no tracking

Audit scoring and compliance thresholds

Each of the 9 indicators is scored on a 0–2 scale (Maximum total score: 18 points). Audits are conducted quarterly across the four Community Health Centers (Same, Turiscai, Fatuberlio, and Alas) by the Municipal Surveillance Officer. Performance compliance levels are defined as follows:

- **Excellent compliance (90%–100%):** 17–18 points. Surveillance standards fully met. Maintenance of current protocols recommended.
- **Moderate compliance (70%–89%):** 13–16 points. Surveillance standard acceptable. Targeted corrections required for specific weak indicators.
- **Critical gaps / low compliance (<70%):** 12 points or below. Major structural or capacity failures. Requires immediate corrective actions, including on-site monitoring and mandatory staff training.