

Supplementary Table 1. **Knowledge, attitudes and practices of human rabies surveillance professionals on core activities of rabies surveillance, Nghe An, Viet Nam, 2025 (N = 236)**

Survey question		Survey role			Total (N = 236)
Knowledge ^a		Preventive medicine (n = 98)	Clinical (n = 45)	Vaccination service (n = 93)	
What is the etiological agent of rabies?	Correct	95 (96.9)	45 (100.0)	93 (100.0)	233 (98.7)
	Incorrect	3 (3.1)	0 (0.0)	0 (0.0)	3 (1.3)
What is the most common source of human rabies in Viet Nam?	Correct	93 (94.9)	44 (97.8)	90 (96.8)	227 (96.2)
	Incorrect	5 (5.1)	1 (2.2)	3 (3.2)	9 (3.8)
What is the primary route of rabies transmission to humans?	Correct	98 (100.0)	45 (100.0)	93 (100.0)	236 (100.0)
	Incorrect	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
What immediate actions should be taken after a bite by a suspected rabid animal?	Correct	71 (72.5)	33 (73.3)	73 (78.5)	177 (75.0)
	Incorrect	27 (27.5)	12 (26.7)	20 (21.5)	59 (25.0)
Can rabies vaccine be used during pregnancy and breastfeeding?	Correct	92 (93.9)	43 (95.6)	92 (98.9)	227 (96.2)
	Incorrect	6 (6.1)	2 (4.4)	1 (1.1)	9 (3.8)
When is rabies immunoglobulin (RIG) indicated?	Correct	79 (80.6)	37 (82.2)	73 (78.5)	189 (80.1)
	Incorrect	19 (19.4)	8 (17.8)	20 (21.5)	47 (19.9)
According to regulations, when should a suspected human rabies case be reported?	Correct	96 (98.0)	41 (91.1)	89 (95.7)	226 (95.8)
	Incorrect	2 (2.0)	4 (8.9)	4 (4.3)	10 (4.2)
Which information should be recorded in epidemiologic investigation of human rabies?	Correct	66 (67.3)	35 (77.8)	64 (68.8)	165 (69.9)
	Incorrect	32 (32.7)	10 (22.2)	29 (31.2)	71 (30.1)
Which specimen is used for laboratory confirmation of human rabies?	Correct	52 (53.1)	22 (48.9)	48 (51.6)	122 (51.7)
	Incorrect	46 (46.9)	23 (51.1)	45 (48.4)	114 (48.3)
What is the purpose of analysing rabies surveillance data?	Correct	98 (100.0)	45 (100.0)	93 (100.0)	236 (100.0)
	Incorrect	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
What is the reporting frequency for rabies vaccine and RIG statistics?	Correct	66 (67.3)	26 (57.8)	72 (77.4)	164 (69.5)
	Incorrect	32 (32.7)	19 (42.2)	21 (22.6)	72 (30.5)
How is a rabies outbreak defined?	Correct	29 (29.6)	15 (33.3)	35 (37.6)	79 (33.5)
	Incorrect	69 (70.4)	30 (66.7)	58 (62.4)	157 (66.5)
When should early outbreak detection activities be initiated?	Correct	48 (49.0)	17 (37.8)	49 (52.7)	114 (48.3)
	Incorrect	50 (51.0)	28 (62.2)	44 (47.3)	122 (51.7)
Attitudes					
Early detection of human rabies cases is an essential duty of health workers.	Strongly disagree	6 (6.1)	3 (6.7)	3 (3.2)	12 (5.1)
	Disagree	2 (2.0)	0 (0.0)	1 (1.1)	3 (1.3)
	Neutral	0 (0.0)	1 (2.2)	5 (5.4)	6 (2.5)
	Agree	28 (28.6)	13 (28.9)	22 (23.7)	63 (26.7)
	Strongly agree	62 (63.3)	28 (62.2)	62 (66.7)	152 (64.4)
The current rabies case definition is adequate to detect cases.	Strongly disagree	4 (4.1)	3 (6.7)	3 (3.2)	10 (4.2)
	Disagree	2 (2.0)	1 (2.2)	1 (1.1)	4 (1.7)
	Neutral	2 (2.0)	1 (2.2)	6 (6.5)	9 (3.8)
	Agree	39 (39.8)	20 (44.4)	39 (41.9)	98 (41.5)
	Strongly agree	51 (52.0)	20 (44.4)	44 (47.3)	115 (48.7)

I am confident in conducting epidemiologic investigation for human rabies.	Strongly disagree	4 (4.1)	1 (2.2)	2 (2.2)	7 (3.0)
	Disagree	1 (1.0)	2 (4.4)	2 (2.2)	5 (2.1)
	Neutral	4 (4.1)	9 (20.0)	10 (10.8)	23 (9.8)
	Agree	44 (44.9)	18 (40.0)	39 (41.9)	101 (42.8)
	Strongly agree	45 (45.9)	15 (33.3)	40 (43.0)	100 (42.4)
Reporting suspected cases within 48 hours is necessary.	Strongly disagree	4 (4.1)	4 (8.9)	2 (2.2)	10 (4.2)
	Disagree	0 (0.0)	0 (0.0)	1 (1.1)	1 (0.4)
	Neutral	1 (1.0)	0 (0.0)	0 (0.0)	1 (0.4)
	Agree	26 (26.5)	10 (22.2)	21 (22.6)	57 (24.6)
	Strongly agree	67 (68.4)	31 (68.9)	69 (74.2)	167 (70.8)
Collecting and testing specimens from suspected rabies patients is necessary.	Strongly disagree	4 (4.1)	5 (11.1)	2 (2.2)	11 (4.7)
	Disagree	0 (0.0)	0 (0.0)	1 (1.1)	1 (0.4)
	Neutral	6 (6.1)	1 (2.2)	4 (4.3)	11 (4.7)
	Agree	30 (30.6)	17 (37.8)	41 (44.1)	88 (37.3)
	Strongly agree	58 (59.2)	22 (48.9)	45 (48.4)	125 (53.0)
Analysing rabies data is necessary.	Strongly disagree	4 (4.1)	3 (6.7)	2 (2.2)	9 (3.8)
	Disagree	0 (0.0)	0 (0.0)	1 (1.1)	1 (0.4)
	Neutral	0 (0.0)	1 (2.2)	0 (0.0)	1 (0.4)
	Agree	37 (37.8)	17 (37.8)	33 (35.5)	87 (36.9)
	Strongly agree	57 (58.2)	24 (53.3)	57 (61.3)	138 (58.5)
The current surveillance system is simple and feasible at my level.	Strongly disagree	4 (4.1)	3 (6.7)	1 (1.1)	8 (3.4)
	Disagree	7 (7.1)	1 (2.2)	2 (2.2)	10 (4.2)
	Neutral	12 (12.2)	6 (13.3)	12 (12.9)	30 (12.7)
	Agree	34 (34.7)	21 (46.7)	42 (45.2)	97 (41.1)
	Strongly agree	41 (41.8)	14 (31.1)	36 (38.7)	91 (38.6)
I am willing to participate in rabies outbreak response when needed.	Strongly disagree	4 (4.1)	3 (6.7)	2 (2.2)	9 (3.8)
	Disagree	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Neutral	0 (0.0)	2 (4.4)	0 (0.0)	2 (0.9)
	Agree	31 (31.6)	18 (40.0)	32 (34.4)	81 (34.3)
	Strongly agree	63 (64.3)	22 (48.9)	59 (63.4)	144 (61.0)
Collaboration with the veterinary sector is effective in outbreak response.	Strongly disagree	5 (5.1)	2 (4.4)	3 (3.2)	10 (4.2)
	Disagree	0 (0.0)	1 (2.2)	1 (1.1)	2 (0.9)
	Neutral	2 (2.0)	0 (0.0)	1 (1.1)	3 (1.3)
	Agree	30 (30.6)	16 (35.6)	30 (32.3)	76 (32.2)
	Strongly agree	61 (62.2)	26 (57.8)	58 (62.4)	145 (61.4)
Post-exposure vaccination for pregnant women is necessary.	Strongly disagree	4 (4.1)	3 (6.7)	2 (2.2)	9 (3.8)
	Disagree	0 (0.0)	1 (2.2)	0 (0.0)	1 (0.4)
	Neutral	4 (4.1)	0 (0.0)	2 (2.2)	6 (2.5)
	Agree	35 (35.7)	18 (40.0)	27 (29.0)	80 (33.9)
	Strongly agree	55 (56.1)	23 (51.1)	62 (66.7)	140 (59.3)
Sharing information on animal-bite vaccinees with the veterinary sector is necessary.	Strongly disagree	6 (6.1)	2 (4.4)	2 (2.2)	10 (4.2)
	Disagree	1 (1.0)	2 (4.4)	4 (4.3)	7 (3.0)
	Neutral	3 (3.0)	1 (2.2)	4 (4.3)	8 (3.4)
	Agree	38 (38.8)	19 (42.2)	35 (37.6)	92 (39.0)
	Strongly agree	50 (51.0)	21 (46.7)	48 (51.6)	119 (50.4)

Use of information technology is necessary for rabies surveillance.	Strongly disagree	4 (4.1)	2 (4.4)	2 (2.2)	8 (3.4)
	Disagree	0 (0.0)	1 (2.2)	1 (1.1)	2 (0.8)
	Neutral	0 (0.0)	0 (0.0)	4 (4.3)	4 (1.7)
	Agree	40 (40.8)	19 (42.2)	31 (33.3)	90 (38.1)
	Strongly agree	54 (55.1)	23 (51.1)	55 (59.1)	132 (55.9)
Training courses improve the quality of rabies surveillance and control.	Strongly disagree	4 (4.1)	2 (4.4)	2 (2.2)	8 (3.4)
	Disagree	0 (0.0)	1 (2.2)	0 (0.0)	1 (0.4)
	Neutral	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Agree	24 (24.5)	14 (31.1)	21 (22.6)	59 (25.0)
	Strongly agree	70 (71.4)	28 (62.2)	70 (75.3)	168 (71.2)
Raising community awareness is crucial for rabies prevention and control.	Strongly disagree	4 (4.1)	4 (8.9)	2 (2.2)	10 (4.2)
	Disagree	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Neutral	0 (0.0)	0 (0.0)	1 (1.1)	1 (0.4)
	Agree	18 (18.4)	13 (28.9)	17 (18.3)	48 (20.3)
	Strongly agree	76 (77.6)	28 (62.2)	73 (78.5)	177 (75.0)
Practices^a					
When recording a suspected rabies case, did you document all information (e.g. time, location, source of exposure)?	Correct	97 (99.0)			97 (99.0)
	Incorrect	1 (1.0)			1 (1.0)
When recording a suspected rabies case, did you order sampling and transport of specimens for confirmatory testing?	Correct	40 (40.8)			40 (40.8)
	Incorrect	58 (59.2)			58 (59.2)
Do you share information on bite victims who go for rabies vaccination with veterinary authorities?	Correct	19 (19.4)			19 (19.4)
	Incorrect	79 (80.6)			79 (80.6)
Do you use any tool to analyse data?	Correct	39 (39.8)			39 (39.8)
	Incorrect	59 (60.2)			59 (60.2)
When suspecting a rabies case, which signs or symptoms do you rely on for diagnosis?	Correct		20 (44.4)		20 (44.4)
	Incorrect		25 (55.6)		25 (55.6)
Which infection-prevention measures for rabies do you implement in the clinical setting?	Correct		32 (71.1)		32 (71.1)
	Incorrect		13 (28.9)		13 (28.9)
When documenting a suspected rabies case, which information do you usually record?	Correct		37 (82.2)		37 (82.2)
	Incorrect		8 (17.8)		8 (17.8)
When do you report suspected rabies cases to supervisors or preventive medicine authorities?	Correct		40 (88.9)		40 (88.9)
	Incorrect		5 (11.1)		5 (11.1)
During pre-/post-vaccination counselling for rabies vaccine and/or RIG, what information do you usually provide?	Correct			80 (86.0)	80 (86.0)
	Incorrect			13 (14.0)	13 (14.0)
When recording vaccinees, which information do you usually document?	Correct			84 (90.3)	84 (90.3)
	Incorrect			9 (9.7)	9 (9.7)
How often do you report rabies vaccine and RIG administration data to supervisors?	Correct			90 (96.8)	90 (96.8)
	Incorrect			3 (3.2)	3 (3.2)
How do you manage cases bitten by animals with clinical rabies?	Correct			20 (21.5)	20 (21.5)
	Incorrect			73 (78.5)	73 (78.5)

KAP: knowledge, attitudes and practices; PEP: post-exposure prophylaxis; RIG: rabies immunoglobulin.

Values are *n* (%). Blank cells indicate that an item was not applicable to a particular professional group.

^a For knowledge and practice items, responses were categorized as correct or incorrect according to the scoring key based on the national rabies surveillance guidelines; some items were originally yes/no questions.