

Table S1: Variables considered as potential risk factors of avian influenza subtype H9 outbreaks in poultry farms of central lowland Nepal.

SN	Variables	Category	Cases (n=51)	Control (n=51)
Farm and flock characteristics				
1	Median flock size	>2000	29	18
		≤2000	22	33
2	Distance from the main road	≤0.5 Km	22	12
		>0.5 Km	29	39
3	Distance from the nearest poultry farm	≤1 Km	41	44
		>1 Km	10	7
4	Distance from the nearest infected farm	≤1 Km	20	1
		>1 Km	31	50
5	Age of the flock during sample submission in the lab	>28.7 weeks	25	24
		≤28.7 Weeks	26	27
6	History of IBD in the flock	Yes	11	3
		No	40	48
7	History of <i>E. coli</i> in the flock	Yes	28	26
		No	23	25
8	History of H9 in the farm	Yes	25	0
		No	26	51
Farm management and biosecurity				
9	Fumigation	Yes	8	14
		No	43	37
10	Water Source	Tap Water	26	21
		Other Source	25	30
11	The flooring of the farm	Cemented	47	48
		Other	4	3
12	Drinking water system	Automatic	32	27
		Manual	19	24
13	Sharing of farm instruments or feed	Yes	9	3
		No	42	48
14	Use of apron or separate cloth in the shed	Yes	7	22
		No	44	29
15	Use of boot or separate slippers inside the shed	Yes	34	44
		No	17	7
16	Footbath at the farm entrance	Yes	5	7
		No	46	44
17	Visitors allow inside poultry shed	Yes	25	13
		No	26	38
18		Yes	16	22

	Spraying workers before entering poultry shed	No	35	29
19	Spraying visitors before entering inside the farm	Yes	30	34
		No	21	17
20	Disinfection around the farm	Yes	40	42
		No	11	9
21	Farm fully fenced	Yes	16	13
		No	35	38
22	Wild birds coming around the farm	Yes	32	13
		No	19	38
23	Presence of rodents inside poultry shed	Yes	37	37
		No	14	14
24	Pond or water reservoir around the farm	Yes	17	14
		No	37	43
25	Biosecurity sign in the farm	Yes	2	8
		No	49	43