Robustness represents the ability of the surveillance system to produce acceptable outcomes over a range of assumptions about uncertainty by maximizing the reliability of an adequate outcome.

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	Surveillance design step	Advice for improvement of ROBUSTNESS
1	**Surveillance system**	
1.1	**Hazard**	
1.2	**Surv. Objective**	
1.3	**Geographical area covered**	
1.4	**Susceptible species**	
1.5	**Risk characteristics**	
2	**Components overview**	
3	**Target population**	
3.1	**Target species**	
3.2	**Target sector**	
3.3	**Sectors missed**	
3.4	**Geographical area covered**	
3.5	**Target criteria**	
3.6	**Percentage covered**	
4	**Disease suspicion**	
4.1	**Definition**	
4.2	**Obligations**	
4.3	**Notification procedures**	
4.4	**Actions upon suspicions**	
4.5	**Actions upon confirmation**	
5	**Enhancements**	
6	**Testing protocol**	Consider choosing a test with low uncertainty in sensitivity and specificity to increase robustness.
6.1	**Type of test to be carried out**	
6.2	**Type of sample to be collected**	
6.3	**Pooling**	
6.4	**Screening/first test**	
6.5	**Confirmatory/ second test**	
6.6	**Further details**	

7	**Study design**	If you are uncertain about input values (e.g. for sample size, test characteristics) or assumptions made about the population, run a sensitivity analysis to determine the effectiveness of your components over the full range of values. If any parameter has a major effect on the outcome, consider collecting additional data to minimize uncertainty for this parameter.
7.1	**Point of sample collection**	
7.2	**Selection of units**	
7.3	**Target unit**	
7.4	**Sampling unit**	
7.5	**Sampling design**	
7.6	**Number of units in the target population**	
7.7	**Sensitivity of the testing protocol**	
7.8	**Specificity of the testing protocol**	
8	**Sampling strategy**	
8.1	**Sampling at the primary sampling unit (PSU) level:**	
8.2	**Sampling at the secondary sampling unit (SSU) level:**	
8.3	**Selection criteria WITHIN the population**	
8.4	**Risk-based allocation**	
8.5	**Sample size calculation**	
8.6	**Sample allocation at the primary level**	
8.7	**Sample allocation at the Secondary level**	
8.8	**Sample collection timeline**	
9	**Data Generation/ Sampling collection process**	
9.1	**WHO will collect the samples?**	
9.2	**HOW will samples be collected?**	
9.3	**WHEN/HOW OFTEN will samples be collected?**	
9.4	**Training**	
9.5	**Follow-up**	
10	**Transfer means**	
10.1	**HOW will samples be transferred?**	If complicated procedures for transportation are required, robustness may be reduced.
10.2	**WHEN/HOW OFTEN will samples be collected?**	
10.3	**Training**	
11	**Data Translation/ sample analyses process**	
11.1	**WHO will perform the analyses?**	
11.2	**HOW will samples be analysed**	
11.3	**WHEN/HOW OFTEN will samples be collected?**	
11.4	**Expected LOAD**	

11.5	**Training**	
11.6	**Follow-up**	
12	**Epidemiological analyses**	
12.1	**Are there any epidemiological DATA that need to be collected?**	
12.2	**WHO will perform the analyses?**	
12.3	**HOW will epidemiological analyses be performed?**	
12.4	**WHEN/HOW OFTEN?**	
12.5	**Training**	
12.6	**Data management needs**	
12.7	**Software needs**	
13	**Dissemination of results**	
13.1	**WHO will disseminate the results?**	
13.2	**WHO is the TARGET of dissemination?**	
13.3	**HOW will results be disseminated?**	
13.4	**WHEN/HOW OFTEN?**	
14	**Surveillance review**	
14.1	**Who**	
14.2	**When**	
14.3	**How often**