

**Precision** represents how closely defined a numerical estimate is. A precise estimate has a narrow confidence interval. Precision is influenced by prevalence, sample size and surveillance system quality.

	Surveillance design step	Advice for improvement of PRECISION
<b>1</b>	<b>Surveillance system</b>	
<b>1.1</b>	<b>Hazard</b>	
<b>1.2</b>	<b>Surv. Objective</b>	
<b>1.3</b>	<b>Geographical area covered</b>	
<b>1.4</b>	<b>Susceptible species</b>	
<b>1.5</b>	<b>Risk characteristics</b>	
<b>2</b>	<b>Components overview</b>	
<b>3</b>	<b>Target population</b>	
<b>3.1</b>	<b>Target species</b>	
<b>3.2</b>	<b>Target sector</b>	
<b>3.3</b>	<b>Sectors missed</b>	
<b>3.4</b>	<b>Geographical area covered</b>	
<b>3.5</b>	<b>Target criteria</b>	
<b>3.6</b>	<b>Percentage covered</b>	
<b>4</b>	<b>Disease suspicion</b>	
<b>4.1</b>	<b>Definition</b>	
<b>4.2</b>	<b>Obligations</b>	
<b>4.3</b>	<b>Notification procedures</b>	
<b>4.4</b>	<b>Actions upon suspicions</b>	
<b>4.5</b>	<b>Actions upon confirmation</b>	
<b>5</b>	<b>Enhancements</b>	
<b>6</b>	<b>Testing protocol</b>	Consider choosing a test with low uncertainty in sensitivity and specificity to improve precision.
<b>6.1</b>	<b>Type of test to be carried out</b>	
<b>6.2</b>	<b>Type of sample to be collected</b>	
<b>6.3</b>	<b>Pooling</b>	
<b>6.4</b>	<b>Screening/first test</b>	
<b>6.5</b>	<b>Confirmatory/ second test</b>	
<b>6.6</b>	<b>Further details</b>	
<b>7</b>	<b>Study design</b>	Carefully determine the sample size requirements to achieve adequate precision. A study that is insufficiently precise may be a waste of time and money. A study that collects too much data is wasteful.
<b>7.1</b>	<b>Point of sample collection</b>	
<b>7.2</b>	<b>Selection of units</b>	

<b>7.3</b>	<b>Target unit</b>	
<b>7.4</b>	<b>Sampling unit</b>	
<b>7.5</b>	<b>Sampling design</b>	
<b>7.6</b>	<b>Number of units in the target population</b>	
<b>7.7</b>	<b>Sensitivity of the testing protocol</b>	
<b>7.8</b>	<b>Specificity of the testing protocol</b>	
<b>8</b>	<b>Sampling strategy</b>	
<b>8.1</b>	<b>Sampling at the primary sampling unit (PSU) level:</b>	
<b>8.2</b>	<b>Sampling at the secondary sampling unit (SSU) level:</b>	
<b>8.3</b>	<b>Selection criteria WITHIN the population</b>	
<b>8.4</b>	<b>Risk-based allocation</b>	
<b>8.5</b>	<b>Sample size calculation</b>	
<b>8.6</b>	<b>Sample allocation at the primary level</b>	
<b>8.7</b>	<b>Sample allocation at the Secondary level</b>	
<b>8.8</b>	<b>Sample collection timeline</b>	
<b>9</b>	<b>Data Generation/ Sampling collection process</b>	
<b>9.1</b>	<b>WHO will collect the samples?</b>	
<b>9.2</b>	<b>HOW will samples be collected?</b>	
<b>9.3</b>	<b>WHEN/HOW OFTEN will samples be collected?</b>	More information will improve the precision.
<b>9.4</b>	<b>Training</b>	
<b>9.5</b>	<b>Follow-up</b>	Lack of follow up may lead to not getting the anticipated sample size, which may influence precision.
<b>10</b>	<b>Transfer means</b>	
<b>10.1</b>	<b>HOW will samples be transferred?</b>	
<b>10.2</b>	<b>WHEN/HOW OFTEN will samples be collected?</b>	
<b>10.3</b>	<b>Training</b>	
<b>11</b>	<b>Data Translation/ sample analyses process</b>	
<b>11.1</b>	<b>WHO will perform the analyses?</b>	
<b>11.2</b>	<b>HOW will samples be analysed</b>	
<b>11.3</b>	<b>WHEN/HOW OFTEN will samples be collected?</b>	
<b>11.4</b>	<b>Expected LOAD</b>	
<b>11.5</b>	<b>Training</b>	
<b>11.6</b>	<b>Follow-up</b>	
<b>12</b>	<b>Epidemiological analyses</b>	
<b>12.1</b>	<b>Are there any epidemiological DATA that need to be collected?</b>	
<b>12.2</b>	<b>WHO will perform the analyses?</b>	
<b>12.3</b>	<b>HOW will epidemiological analyses be performed?</b>	
<b>12.4</b>	<b>WHEN/HOW OFTEN?</b>	
<b>12.5</b>	<b>Training</b>	
<b>12.6</b>	<b>Data management needs</b>	
<b>12.7</b>	<b>Software needs</b>	
<b>13</b>	<b>Dissemination of results</b>	

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	



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