

**ANNEXE VI**  
**HEALTH FACILITY SURVEY-BHUTAN, 2009**  
**QUESTIONNAIRE FOR ASSESSMENT OF LABORATORY SERVICES**  
**(Regional Referral Hospitals)**

Serial number of health facility

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**General Information**

Name of the facility:		
District:	Gewog/Town:	
Name and designations of persons interviewed:		
Interview completion status:    1.Completed <input type="checkbox"/> 2.Not completed <input type="checkbox"/>		
If not completed, specify the question number from where the interview was terminated:		
<table border="1" style="width: 100px; height: 20px; margin: 0 auto;"> <tr> <td></td> </tr> </table>		
Type of health facility:		
1.    National Referral Hospital	<input type="checkbox"/>	
2.    Public Health Laboratory	<input type="checkbox"/>	
3.    Regional Referral Hospitals	<input type="checkbox"/>	

Interviewer's code: \_\_\_/\_\_\_/\_\_\_    Signature: \_\_\_\_\_

Interview date: \_\_\_/\_\_\_/\_\_\_

Start time of interview: \_\_\_\_\_

End time of interview: \_\_\_\_\_

Checked by:  
 Name of supervisor: \_\_\_\_\_  
 Signature: \_\_\_\_\_

Date: \_\_\_/\_\_\_/\_\_\_

### Section 1: Laboratory Tests Conducted

No.	Questions	Coding categories	Skip to	Score
	<b><i>Laboratory tests conducted for HIV</i></b>			
Q1	What specimens are used for HIV testing?	Serum 1 Plasma 2		X
Q2	Is there an algorithm that is followed for HIV testing? (observation)	Yes 1 No 2	→ Q 4	2 0
Q 3	If yes, is this based on existing national guidelines? (observation)	Yes 1 No 2		2 0
Q4	Are CD4 tests done for HIV positive patients? (observation)	Yes 1 No 2		2 0
	<b><i>Laboratory tests conducted for STI</i></b>			
Q5	What laboratory tests are conducted for STI?  (Multiple responses)  Circle 1 if mentioned  Circle 2 if not mentioned	Gonorrhoea 1 2  Chlamydia 1 2  Syphilis 1 2  Hepatitis B 1 2 Hepatitis C 1 2		2 1
Q6	What specimens are used for STI testing?  (Multiple responses)  Circle 1 if mentioned  Circle 2 if not mentioned	Blood 1 2  Urethral swab (male) 1 2  Vaginal swab (female) 1 2  Urine (male/female) 1 2		X
Q7	What are the tests performed for STI?  (Multiple responses)  Circle 1 if mentioned  Circle 2 if not mentioned	Gram stain 1 2  Culture &Sensitivity 1 2  Dark field microscopy 1 2  TPHA 1 2  RPR/VDRL 1 2		2 1 0
<b>Score for this sub section ( -----/ -----) x100</b>				%
<b>Grade for this section</b>				

## Section 2: Facility setup and supplies

No.	Questions	Coding categories	Skip to	Score
<b>A. Infrastructure</b>				
<b>Physical condition of the laboratory</b>				
Q8	Is the laboratory space adequate? (observation)	Yes 1 No 2		2 0
<b>Water supply</b>				
Q9.1	Is adequate water supply available in the laboratory? (observation)	Yes 1 No 2		2 0
<b>Autoclave</b>				
Q9.2	Does the laboratory have access to a functioning autoclave? (observation)	Yes 1 No 2	→ Q9.5	2 0
Q9.3	If autoclaving is done, is there an autoclave on site? (observation)	Yes 1 No 2		2 0
Q9.4	Are standard procedures followed for autoclaving?	Yes 1 No 2		2 0
Q9.5	If there is no autoclave, how are materials sterilized usually, in last 7 days?	Boiling 1 Hot air oven 2 Other 99 (Specify).....		2 1 0
<b>Incinerator</b>				
Q9.6	Does the laboratory have access to a functioning incinerator? (observation)	Yes 1 No 2	→ Q10.1	2 0
Q9.7	Is it within the reachable distance?	Yes 1 No 2		2 0
<b>Score for this sub-section (...../.....)×100</b>				%
<b>Grade for this sub- section</b>				
<b>B. Equipments/Materials</b>				
		<b>Presence</b>	<b>Functioning</b>	
Q10.1	Microscope (observation)	Yes 1 No 2	Yes 1 No 2	2 0
Q10.2	Sink for staining (observation)	Yes 1 No 2		2 0
Q10.3	ELISA reader (observation)	Yes 1 No 2	Yes 1 No 2	2 0
Q10.4	ELISA washer (observation)	Yes 1 No 2	Yes 1 No 2	2 0
Q10.5	Micropipettes (observation)	Yes 1 No 2	Yes 1 No 2	2 0
Q10.6	Candle Jar (observation)	Yes 1 No 2	Yes 1 No 2	2 0

No.	Questions	Coding categories				Skip to	Score
Q10.7	Bunsen Burner/spirit lamp (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q10.8	Hot Air Oven (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q10.9	Incubator (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q10.10	Plate Shaker (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q10.11	CD4 (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q10.12	Refrigerator (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q10.13	-20°C freezer (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q 10.14	-70°C freezer (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q10.15	Are the number of refrigerators (-20°C and -70°C) adequate for the need of this laboratory? (observation)	Yes	1	Yes	1		2 0
		No	2	No	2		
Q10.16	Computer (observation)	Yes			1		2 0
		No			2		
Q10.17	Printer (observation)	Yes			1		2 0
		No			2		
<b>Score for this sub section ( -----/ -----) x100</b>							%
<b>Grade for this sub section</b>							
<b>C. Laboratory supplies</b>							
<b>Reagents/Kits/Chemicals</b>							
Q11.1	Does the laboratory have adequate reagents/kits for STI diagnosis available? (observation)	Yes			1		2 1 0
		No			2		
Q11.2	Does the laboratory have adequate reagents/kits for HIV diagnosis available? (observation)	Yes			1		2 1 0
		No			2		
Q11.3	Do the reagents/kits usually arrive in the reference laboratory in right conditions (e.g. temperature, intact packages, etc)	Yes			1		2 1 0
		No			2		

No.	Questions	Coding categories	Skip to	Score
Q11.4	What does the laboratory do if the supplies do not arrive in right condition?	Discard 1 Returned 2 Reuse 3 Other 99 Specify.....		2 0
Q11.5	Are any of the reagents/kits available at the facility beyond expired date? (observation)	Yes 1 No 2	→ Q 11.7	2 0
Q11.6	What is done with the expired reagents/kits?	Discard 1 Returned 2 Reuse 3 Other 99 Specify.....		2 0
Q11.7	Does the laboratory usually have adequate quantity of disinfectants for STI? (observation)	Yes 1 No 2		2 1 0
Q11.8	What are the disinfectants used in the laboratory? (Multiple responses)  Circle 1 if mentioned Circle 2 if not mentioned	Sodium Hypochlorite solution 1 2 Savlon 1 2 70% ethanol 1 2		2 1 0
<b>Score for this sub-section (...../.....)×100</b>				<b>%</b>
<b>Grade for this sub- section</b>				
<b>Other laboratory supplies</b>				
Q11.9	Are following laboratory supplies available to perform the test? (Multiple responses)  Circle 1 if mentioned Circle 2 if not mentioned	Glassware 1 2 Tips 1 2 Eppendorf tube 1 2 Bucket 1 2 Disposable syringe 1 2 Needle 1 2 Mask 1 2		2 1 0
Q11.10	Is separate glassware, tips, transfer	Yes 1		2 0

No.	Questions	Coding categories	Skip to	Score
	pipettes etc used for testing? (observation)	No 2		
<b>Gloves</b>				
Q11.11	Was this facility ever out of stock of gloves in the last 12 months? (observation)	Yes 1 No 2		2 0
<b>Score for this sub-section (...../.....)×100</b>				<b>%</b>
<b>Grade for this sub- section</b>				

### Section 3: Personnel

No.	Questions	Coding categories	Skip to	Score
<b><i>Virologist/Microbiologist</i></b>				
Q12.1	Is there a virologist/microbiologist is present in this laboratory now? (observation)	Yes 1 No 2	→Q12.3	2 0
Q12.2	If yes, has she/he received training in STI/HIV?	Yes 1 No 2		2 0
<b><i>Laboratory technologist</i></b>				
Q12.3	Is there any laboratory technologist is present in this laboratory now? (observation)	Yes 1 No 2	→Q12.5	2 0
Q12.4	If yes, has she/he training on the relevant tests that s/he conducts?	Yes 1 No 2		2 0
<b><i>Laboratory technician</i></b>				
Q12.5	Is there a laboratory technician is present in this laboratory now? (observation)	Yes 1 No 2		2 0
Q12.6	If yes, has she/he training on the relevant tests that s/he conducts?	Yes 1 No 2	→Q12.7	2 0
<b><i>Laboratory cleaner/attendant/care taker</i></b>				
Q12.7	Is there any cleaner/attendant available in this laboratory? (observation)	Yes 1 No 2	→Q12.10	2 0
Q12.8	Does the cleaner/attendant have to handle biohazard substances?	Yes 1 No 2		X
Q12.9	If yes, are measures taken for the individual's protection?	Gloves 1 2 Mask 1 2		2 1 0

No.	Questions	Coding categories	Skip to	Score
	(multiple responses) Circle 1 if mentioned Circle 2 if not mentioned	Apron 1 2 Foot wear 1 2 Other 99 Specify.....		
<b>Biomedical Engineer</b>				
Q12.10	Is there an engineer available who is responsible for maintaining the equipment in this laboratory? (observation)	Yes 1 No 2	→Q13.1	2 0
Q12.11	If yes, does she/he have B.Sc level of qualification?	Yes 1 No 2		2 1
<b>Score for this section (...../.....)×100</b>				%
<b>Grade for this section</b>				

#### Section 4: Universal Precautions and waste disposal

No.	Questions	Coding categories	Skip to	Score
<b>A. General infection prevention practices</b>				
Q13.1	Are staffs at the laboratory aware of the importance of infection prevention and basic measures necessary? Multiple response Circle 1 if mentioned Circle 2 if not mentioned	Hand washing 1 2 Gloving 1 2 Decontamination 1 2 Cleaning 1 2 Sterilisation/Autoclaving 1 2 Waste disposal 1 2 Management of accidental injury 1 2		2 0
Q13.2	Have staffs working in this laboratory received any training on Universal	Yes 1 No 2		2 0
Q13.3	Is all laboratory staff following rules of hand washing? (ask to show the procedure)	Yes 1 No 2		2 0
Q13.4	Is the recent universal precaution guideline available? (observation)	Yes 1 No 2		2 1 0

No.	Questions	Coding categories	Skip to	Score
Q13.5	Are gloves usually used in the laboratory while handling samples? (observation)	Yes 1 No 2		2 0
Q13.6	Are gloves usually used in the laboratory while conducting HIV/STI tests?	Yes 1 No 2		2 0
Q13.7	Are lab coats worn in laboratory while performing the tests? (observation)	Yes 1 No 2		2 0
Q13.8	Are mats placed on the testing area? (observation)	Yes 1 No 2		2 0
Q13.9	Is there any PEP system in place?	Yes 1 No 2		2 0
<b>Score for this section (...../.....)×100</b>				%
<b>Grade for this sub section</b>				
<b>B. Safe handling of needles and sharp instruments</b>				
Q13.10	Where are the sharps disposed usually? (observation)	Plastic bins 1 Safety box/sharp box 2 Bottle 3 Other (Specify)..... 99		2 0
Q13.11	Do all clinical staff dispose needle and syringe appropriately?	Yes 1 No 2		2 0
<b>Score for this section (...../.....)×100</b>				%
<b>Grade for this sub section</b>				
<b>C. Decontamination, cleaning and sterilization of instruments</b>				
Q14.1	Are the instruments decontaminated and sterilized after each use?	Yes 1 No 2		2 0
Q14.2	Is hypochlorite solution/savlon used in this facility?	Yes 1 No 2	→ Q14.6	2 0
Q14.3	If yes, for how long the instruments are dipped?	<10 min 1 10 – 30 min 2 >30 min 3		2 0
Q14.4	How frequently is the hypochlorite solution/savlon prepared?	Daily/whenever required 1 Once in 2 days 2 Others 99 (Specify) .....		2 1 0
Q14.5	After dipping in hypochlorite solution/savlon, are the instruments	Yes 1 No 2		2 0

No.	Questions	Coding categories	Skip to	Score
Q14.6	After cleaning, are instruments autoclaved?	Yes 1 No 2		2 0
Score for this sub section (...../.....) x100				%
Grade for this sub section				
<b>D. Waste disposal</b>				
Q15.1	Is there any established procedure for waste disposal?	Yes 1 No 2		2 0
Q15.2	How sharps are disposed usually? (observation)	Collected in hard closed bin and taken to deep pit burial 1  Collected in any bucket and taken to deep pit burial 2  Other 99  (Specify).....		2 0
Q15.3	How glass wares are disposed usually? (observation)	Collected in hard closed bin and taken to deep pit burial 1  Collected in hard closed bin and reused after autoclaving 2  Collected in any bucket and taken to deep pit burial 3  Collected in any bucket and reused after autoclaving 4  Other 99  (Specify).....		2 1 0
Q15.4	How liquid clinical waste is disposed usually?	Decontaminate with disinfectant for 30 min and lead to underground drainage 1  Lead to underground drainage 2  Other 99  (Specify).....		2 0

No.	Questions	Coding categories	Skip to	Score
Q15.5	Are there separate buckets for disposal of contaminated waste (e.g. swab), (Observation)	Yes 1 No 2		2 0
Q15.6	How infectious materials are disposed (e.g. blood, used cotton, gauge) usually? (Observation)	Deep pit burial 1 Burnt 2 Other 99 (Specify).....		2 0
<b>Score for this section (...../.....)×100</b>				<b>%</b>
<b>Grade for this section</b>				

### Section 5: Record Keeping

No.	Questions	Coding categories	Skip to	Score
Q16.1	Does the laboratory keep records of samples that were tested for HIV?(observation)	Yes 1 No 2		2 0
Q16.2	Has the laboratory kept records of samples that were tested for STI? (observation)	Yes 1 No 2		2 0
Q16.3	How are the records of STI/HIV recorded?(observation) (multiple responses) Circle 1 if mentioned Circle 2 if not mentioned	Computerized 1 2 Register book 1 2 Other 99 (Specify).....		2 1 0
Q16.4	Is there any person responsible for maintaining the laboratory test record? (observation)	Yes 1 No 2		2 0
Q16.5	Does the facility provide STI and HIV report to the authority in a timely manner? (observation)	Yes ( Whenever required ) 1 No 2		2 0
<b>Score for this section (...../.....)×100</b>				<b>%</b>
<b>Grade for this section</b>				

### Section 6: Quality Control System (QC)

No.	Questions	Coding categories	Skip to	Score
Q17.1	Is there an internal QC system for HIV/STI testing in this laboratory? (observation)	Yes 1 No 2	→ Q17.3	2 0
Q17.2	If there is none now, was there ever an internal QC system in the laboratory?	Yes 1 No 2		1 0
Q17.3	Is there an external QC system for HIV/STI testing in this laboratory? (observation)	Yes 1 No 2	→ Q17.5	2 0
Q17.4	If there is none now, was there ever an external QC system in the laboratory?	Yes 1 No 2		1 0
Q17.5	Is there any specific personnel for checking the QC system in the laboratory?	Yes 1 No 2		2 0
Q17.6	Has the laboratory ever conducted any QC on any samples received from other laboratories?	Yes 1 No 2	→ Q18.1	X
Q17.7	If yes, is this done on a regular basis?	Yes 1 No 2		X
<b>Score for this section (...../.....)×100</b>				<b>%</b>
<b>Grade for this section</b>				

### Section 7: Confidentiality1

No.	Questions	Coding categories	Skip to	Score
<b>A. General infection prevention practices</b>				
Q18.1	Do all laboratory personnel understand the meaning of confidentiality? ( ask the meaning of confidentiality)	Yes 1 No 2		2 0
Q18.2	Have you had any break in confidentiality in this facility?	Yes 1 No 2	→ Q18.3 → Q19.1	2 0

No.	Questions	Coding categories	Skip to	Score
Q18.3	If yes, how was this managed?  (multiple responses)  Circle 1 if mentioned  Circle 2 if not mentioned	Meeting with all staff 1 2  Meeting with individual person who breaks confidentiality 1 2  Other 99  Specify.....		1 0
<b>Score for this sub-section (...../.....)×100</b>				%
<b>Grade for this sub- section</b>				

### Section 8: Utilization of the services

No.	Questions	Coding categories	Skip to	Score
Q19.1	How many of STI cases tested in the last 12 months? (observation)	<input type="text"/> <input type="text"/> <input type="text"/>		X
Q19.2	How many of HIV cases tested in the last 12 months? (observation)	<input type="text"/> <input type="text"/> <input type="text"/>		X
Q19.3	Proportion of referral cases of STI among the tests performed in the last 12 months? (number of referred cases of STI cases come from other lab/ total number of STI cases tested) x100 (observation)	<input type="text"/> <input type="text"/> <input type="text"/> %		2 1 0
Q19.4	Proportion of referral cases of HIV among the tests performed in the last 12 months? (number of referred cases of HIV cases come from other lab/ total number of HIV cases tested) x100 (observation)	<input type="text"/> <input type="text"/> <input type="text"/> %		2 1 0
<b>Score for this section (...../.....)×100</b>				%
<b>Grade for this section</b>				

**(End the interview by giving thanks to the interview participant)**