

**Kingdom of Cambodia
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Ministry of Health**



**Guidance for establishing Voluntary Confidential Counselling
and HIV testing (VCCT) Centres:**



National Centre for HIV/AIDS, Dermatology and STD

December 2004

Establishing Voluntary Confidential Counselling and Testing (VCCT) Centres: Implementation Guidelines

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Annex 1: List of VCCT Sites in Cambodia, December 2004

Acknowledgements

I would like to acknowledge the tremendous amount of work that has gone into the preparation of the VCCT system which these Guidelines describe, and the effort, skill and enthusiasm that has gone into preparing these Guidelines. They are not a theoretical description only of what SHOULD be; they are also a description of what really IS in the ODs of Cambodia. The staff of the AIDS Care Unit, and especially the VCCT Sub-unit, as well as all the staff and advisers of NCHADS contributing from their own perspective, have worked tirelessly to make this a reality. I have pushed them hard, to expand VCCT service in a way we could not imagine even a year ago; and they have responded with great energy. I must also acknowledge the vital contribution of the VCCT Sub-committee of the Continuum of Care steering committee, who have provided unstinting practical experience, wisdom and technical input. These Guidelines are the result of, as well as describe, a successful partnership.

Dr Mean Chhi Vun
Director of NCHADS

Preface

The “Framework for the Continuum of Care” developed by NCHADS and approved by the Ministry of Health in 2003 describes a number of conditions for the establishment of effective, nation-wide VCCT services. These seek to establish minimum standards for services, setting out the kinds of facilities they should have. This will be important for the development of a system for licensing of all VCCT services by the Ministry of Health only services providing counselling of a defined standard will be licensed; and the development of monitoring and evaluation tools for VCCT expansion program, including standardized routine data collection and reporting including new and private services.

These implementation guidelines are an important step in setting these standards, and establishing the minimum standards acceptable for VCCT services in Cambodia.

NCHADS, and its partners, working through the VCCT sub-committee of the Continuum of Care steering committee are to be congratulated for the development of these guidelines.

Director General of Health
Ministry of Health

1. BACKGROUND: VCCT IN CAMBODIA

The first VCCT Centres in Cambodia were established by the Ministry of Health with assistance from French Cooperation between 1995 and 1997. These first centres were at:

- The Pasteur Institute in Phnom Penh (established 1995)
- The National STD Clinic in Phnom Penh (established 1996)
- Preah Bath Norodom Sihanouk Hospital in Phnom Penh (established 1996)
- Kampong Cham Province (established 1996)
- Battambang province (established 1996)
- Health Centre No. 1 in Siem Reap Province (established 1996)
- Calmette Hospital in Phnom Penh (established 1997)
- Sihanouk Ville RH (established 2000)

Since then, by the end of 2003, another 51 have been established; 30 of these are managed under the NCHADS programme, through Provincial AIDS Offices, and 16 are managed by NGOs. 21 of Cambodia's 24 provinces now have a VCCT service.

VCCT is an important element in the Strategic Plan for HIV/AIDS and STD Prevention and Care 2001-2005. It is a key element in the Continuum of Care Framework, and has been further emphasized in the updated Strategic Plan for HIV/AIDS and STD Prevention and Care 2004-2007.

In December 2002 the official 'Policy, Strategy and Guidelines for HIV Counselling and Testing' was approved by the Ministry of Health, and published. In January 2004 the 'Guide for Implementation' for VCCT was produced by NCHADS to provide personnel working in VCCT with critical information for providing services.

Under updated Strategic Plan for HIV/AIDS and STD Prevention and Care 2004-2007 it is planned that a further 70 VCCT services will be established over the next four years (2004-2005-2006-2007). These Guidelines have been developed to help both provincial and NGO staff in establishing these new services, and in maintaining effective and efficient services.

2. ESTABLISHING VOLUNTARY CONFIDENTIAL COUNSELLING AND TESTING (VCCT) CENTRES

2.1 Steps in establishing and maintaining a VCCT service

There are a number of steps in establishing and maintaining a VCCT service. The main ones are:

- Site Selection and Renovation or Construction
- Registering the Centre
- Equipping the Centre
- Staffing the Centre with trained staff
- Providing regular supplies and consumables
- Running the Centre

It is important to follow all these steps carefully.

2.2 Support for establishing and maintaining a VCCT service

Support for the VCCT service can come from various sources; sometimes one VCCT service will be supported from several sources. The main sources of support are:

- The national budget, through NCHADS
- Various donor funds, managed by NCHADS, such as the ADB/JFPR World Bank, CDC and DFID Grants
- UNICEF
- USAID, through its support to NGOs
- Direct support from other NGOs
- FC

Sometimes these sources are pooled together, as in Koh Kong and Maung Russey, where ADB, CARE, FHI, RACHA and UNICEF funds were pooled to establish the services.

3. SITE SELECTION AND RENOVATION OR CONSTRUCTION

The following table shows, based on NCHADS experience, the steps to follow and the usual time-frame for construction of a VCCT building. Renovation follows the same procedural steps, but is much quicker.

Step	Activity	Who	Duration
1	Site Assessment	NCHADS VCCT sub-Unit, NCHADS Procurement, OD, PAO, PHD, partners (if involved), architect/engineer	1-2 days
2	Develop architectural plan and bill of quantities	Architect from PHD/NCHADS/partner	10 days
3	Partnership Meeting for fund raising (if necessary)	NCHADS VCCT Unit, NCHADS Planning & Resource Management Unit, NCHADS Finance Unit, partners	½ day
4	PHD, OD review and approve on plans	PHD director, OD director	2 weeks after step 2
5	Purchase Request	NCHADS Procurement officer	3 days after step 4
6	Request for quotation from 3 short-listed local firms	NCHADS Procurement officer	1 day after step 5
7	Deadline for submission of quotations	Contractors	2 weeks after step 6
8	Bid opening - Partnership Meeting - (if partners involved)	Bid Evaluation Team	½ day
9	Evaluation, selection and award of contract - Partnership Meeting - (if partners involved)	Bid Evaluation Team	Within 1 week after step 8

10	Contracting with winning firm (and pay 20%)	NCHADS director and contractor	Within 1 week after step 9
11	Mandate of contraction	Contractor	3-6 months (Depend on work)
12	Submission of completion report by firm	Contractor	Contraction completed after step 11
13	Building assessment by NCHADS, PHD and ODs	VCCT staffs NCHADS Finance officer PHD director OD director	1-2 days after step 12
14	70 % payment	NCHADS Finance director	1 week after step 13
15	Check for defects OD	OD director	1 week after step 14
16	Repair of defects by firm	Contractor	1 week after step 15 (if necessary)
17	Assessment and repair defeat	NCHADS procurement officer, OD director	Within 1 week after step 16
18	Certificate of completion: hand over certificate by firm	NCHADS director	Within 1 week of step 17

Thus the whole process should take about 6-9 months. It is important to monitor progress carefully, to make sure the process moves along. Making a thorough site assessment, with a clear report, is the first and most vital step.

REGISTERING THE CENTRE

All VCCT services must be registered and licensed by the Ministry of Health. The procedure is:

1. Submit the application: four things are necessary (see following pages):
 - a. Licensing Application Form: this contains details of the VCCT and where it is, etc
 - b. Letter of Avowal: this is an affirmation of responsibility for the VCCT
 - c. List of staff who will work in the VCCT and their qualifications
2. NCHADS makes an official observational visit, using the standardized checklist.
3. NCHADS recommends the registration and licensing of the VCCT to the Director General of Health Services.

The official forms for this process follow.

5-EQUIPPING THE CENTRE

NCHADS has developed a standardized list of furniture and equipment for VCCTs.

1. Furniture:

No	Items	Unit	Quantity	Unit PriceUS\$*
1	Bed for blood sample collection	Piece	1	120
2	Table for blood sample collection	Piece	1	120
3	Office desk	Piece	2	120
4	Office armchair	Piece	6	70
5	Guest chair	Piece	2	150
6	Cup board	Piece	2	150
7	Lab Chair	Piece	2	100

2. Office Equipment:

No	Items	Unit	Quantity	Unit Price US\$*
1	Desktop computer	Set	1	1125
2	UPS	Piece	1	240
3	Printer (Laser)	Piece	1	355
4	Printer Cartridge	Piece	1	50
5	Auto voltage	Piece	1	80
6	Diskettes	Box	4	5
7	Air Conditioner	Piece	2	350
8	Refrigerator	Piece	1	200
10	Fan	Piece	2	35

3. Lab Equipment

No	Items	Unit	Quantity	Unit Price US\$*
1	Pipettes (micropipettes) 20-200ul	Piece	1	200
2	Pipettes 20-1000ul	Piece	1	200
3	"U" shaped micro plates	Box	12	10
4	Centrifuge	Piece	1	1000
6	Plate shakers	Piece	1	500

* These are 2003 prices

This furniture and equipment should be provided completely to ensure the VCCT can function effectively.

6. STAFFING REQUIREMENTS AND TRAINING

6.1 Staff of a VCCT

The staff of the VCCT should comprise 2 counsellors, 2 laboratory technicians; and one of these will be assigned to be data management officer. These staff have a collective job description:

JOB DESCRIPTION: VCCT STAFF

Title of the post: VCCT staff (PAO9)

Accountable to: Provincial AIDS Office Manager

Accountable for: N/A

Job Summary:

To manage the VCCT Center and service and ensure high quality services are provided.

Specific Responsibilities

1. Manage VCCT Centre and services
2. Provide pre/post test counselling to clients
3. Refer clients
4. Manage lab and run tests
5. Prepare requirements for test kits and consumables
6. Data entry and record keeping
7. Reporting

General Responsibilities

1. To work with due diligence in carrying out the tasks of the position
2. To cooperate helpfully within and between units of the PHD and ODs to strengthen the performance of the PAO
3. To ensure regular, punctual and full-time attendance to duties during official working hours.
4. To strive all times to assist the PAO attain the highest levels of accuracy and honesty in all its activities.
5. To draw the attention of the PAO Manager immediately to any irregularity or other matter of significance affecting the efficient and honest functioning of the unit.
6. To undertake any other duties assigned by the PAO Manager or the PHD Director.

6.2 Training

Three sets of training are organised for new VCCT staff:

6.2.1 Counselling training:

This is a five-day course, for government staff usually conducted at, and by, NCHADS. The course covers:

- Basic information on HIV/AIDS
- HIV situation in the World, and in Cambodia
- What is counselling?
- Counselling skills
- Counselling process
- Couple counselling
- Counselling for prevention
- Counselling for PLHA
- Care and support
- Policy, Strategy and Guidelines for HIV testing
- HIV tests
- Pre-test and post-test counselling
- VCCT site selection
- IEC communication

The curriculum and materials have been developed by the VCCT Subcommittee of the Continuum of Care Steering Committee.

6.2.2 Laboratory training:

This is also a five-day course, for government staff usually conducted at, and by, NCHADS. The course covers:

- Policy and Guidelines for HIV Testing in Cambodia
- Testing Protocol
- How to use various tests: ELISA, Multi-spot, Rapid tests such as Serodia, Determine, Uni-Gold, Stat-pack, etc
- Practice with actual tests
- Assessment and Evaluation

The curriculum and materials have also been developed by the VCCT Subcommittee of the Continuum of Care Steering Committee.

6.2.3 Data Management training:

This too is a five-day course, for government staff usually conducted at, and by, NCHADS. The course covers use of:

- Windows XP

- Epi Info 2002
- Microsoft Access
- Analysis of data

The curriculum and materials have also been developed by the VCCT Subcommittee of the Continuum of Care Steering Committee.

6.3 Performance Based Salary Incentives (PBSI) for VCCT staff

Where the VCCT is enrolled in the PBSI scheme, the following indicators are used by the VCCT team to make their quarterly performance¹:

Voluntary Confidentiality Counselling and Testing
 Quarter/Year.....
 Province.....

Performance Tasks	Verifiable Indicators	Achievement	Score
1. Average monthly caseload	<ul style="list-style-type: none"> - More than 80 clients per month=3 - 60-80 Clients per months = 2 - 40-60 clients per months = 1 - <40% clients per months = 0 	Make an average monthly caseload for the quarter	
2. Provide good quality counselling	<ul style="list-style-type: none"> - > 95% of tested return for test results = 3 - 80-95% of testes return for results as judged by NCHADS technical supervision = 2 - 60-80% of testes return for results =1 	Give data from records, this will be verified by NCHADS VCCT Unit supervision and QA visits.	

¹ Please refer to the NCHADS' "Procedures for the Assessment and Payment of Performance Based Salary Incentives (PBSI) for the NCHADS Programme with DFID Support, approved 29 December 2003" for full details.

	<ul style="list-style-type: none"> - <60% of testes return for results =0 		
3. Provide good quality Testing	<ul style="list-style-type: none"> - 90% test results provided same day = 3 - 75-90% provided same day = 2 - 50-75% provided same day = 1 - <50% provided same day 	Give data from records, this will be verified by NCHADS VCCT Unit supervision and QA visits	
4. Prepare reagent/consumables requirements	<ul style="list-style-type: none"> - 1 reagent/ consumables request submitted on time = 3 - Reagent/ consumables request submitted, but delayed = 2 - No reagent/ consumables request submitted =1 - No reagent/ consumables request submitted for 2 quarters = 0 	Give data consumables request submitted	
5. Maintain records and report to NCHADS	<ul style="list-style-type: none"> - 3 Monthly reports submitted to NCHADS = 3 - 2 Monthly reports submitted to NCHADS = 2 - 1 or no Monthly reports submitted to NCHADS = 1 - No Monthly reports submitted to NCHADS = 0 	Give data reports submitted to NCHADS	
	Total/5 = Performance Grade rounded up		

7. SUPPLIES AND CONSUMABLES

NCHADS has developed a standardized list of furniture and equipment for VCCTs.

Reagents and materials supply

No	Items	Unit	Quantity	Unit Price US\$*
1	HIV Rapid test	Kit/100		165
2	Particle Agglutination HIV test	Kit/100t		190
3	Latex examination glove	Box		5
4	Vacutainer Needle	Box		20
5	Vacutainer Tube	Box		20
6	Yellow Tip	Package		14.40
7	Alcohol	Litre		0.56
8	Cotton wool	Kg		2.8
9	Bleach	Bottle		0.80
10	Tube holder	Box		3.70
11	Envelope	Box		1
12	White Tissues	Piece		1
13	Garbage Can	Kg		3
14	Plastic bag	Ram		3
15	Paper A4	Book		3
16	Appointments books for Counsellor	Book		6
17	Registration book for Counsellor	Book		6
18	Registration book for Lab	Book		3
19	Book for Lab-Counselling	Book		3
20	Permanent pen	Box		1.20

* These are 2003 prices

8.MONITORING AND REPORTING

8.1 Monitoring and Supervision

Monitoring and supervision of VCCT services within an OD is the responsibility of the VCCT Officer in the Provincial AIDS Office (PAO). His/her job description is:

JOB DESCRIPTION: VCCT OFFICER

Title of the post: VCCT Officer (PAO6)

Accountable to: Provincial AIDS Office Manager

Accountable for: N/A

Job Summary:

To manage and coordinate the VCCT element of the HIV/AIDS and STD programme in the province, ensuring it fulfills all the programme targets to which it is committed and that cohesive strategic and operational plans are prepared to guide future activity.

Specific Responsibilities

1. Train health workers for and supervise VCCT services in ODs and RHs
2. Coordinate all VCCT services within the province
3. Ensure the VCCT referral Network is established and functioning
4. Identify requirements for drugs and consumable supplies for VCCTs in the ODs and ensure availability and distribution
5. Maintain VCCT records and data
6. Prepare VCCT Report for the province

General Responsibilities

1. To work with due diligence in carrying out the tasks of the position
2. To cooperate helpfully within and between units of the PHD and ODs to strengthen the performance of the PAO
3. To ensure regular, punctual and full-time attendance to duties during official working hours.
4. To strive all times to assist the PAO attain the highest levels of accuracy and honesty in all its activities.
5. To draw the attention of the PAO Manager immediately to any irregularity or other matter of significance affecting the efficient and honest functioning of the unit.
6. To undertake any other duties assigned by the PAO Manager or the PHD Director.

8.2 Reporting

NCHADS require all VCCT services to prepare the following reports for counselling and laboratory:

1. Monthly report
2. Quarterly report
3. Annual report
4. Data report

All reports must be submitted to NCHADS 2 weeks after the end of the month, the quarter and the year.

9.NETWORKING, PARTNERSHIPS AND REFERRAL

9.1 Purpose of Networking

Voluntary Confidential Counselling and Testing (VCCT) services in Cambodia are an important part of the Continuum of Care for PLWHA.

VCCT services can be delivered in various ways: counselling may be conducted at one place (for example in a health centre or at a home visit) and a sample of blood sent to the laboratory at the RH; or counselling and testing may be done together at a VCCT Centre.

VCCT services may be established and run by a number of partners: the Ministry of Health, NGOs, the private sector, etc.

But it is very important that the various components form a single coherent procedure or network - even if they are divided up by time and place. The components of this network are:

- Ensuring confidentiality
- Pre-test counselling,
- Post-test counselling
- Delivery of results and post-test counselling,
- Supportive counselling, and
- Referral.

9.2 Structure of the Network

For this procedure to work effectively, all the components must be linked together. They need to link together within each OD, within each province, and in a group of provinces at regional level.

At the centre of this network is the **Regional VCCT Hub** - there are 6 regional VCCT Hubs:

- *at Sihanoukville* , for Koh Kong, Sihanoukville, Kep, and Kampot;Takeo
- *at Kampong Cham*, for Kampong Cham, Prey Veng , Svay Rieng,
- *at Kratie* - for Kratie, Stung Treng, Mondulkiri, Ratanakiri

- at Siem Reap ,for Siem Reap ,Kampong Thom,Praeh Vihear,Odor Meanchey
- at *Battambang* - for Battambang, Bantey Meanchey, , Pailin, Pursat
- at *Phnom Penh* - for Phnom Penh, Kandal, Kampong Speu
- The Hub provides all the components of VCCT services, as well as supervision, training, coordination, and quality control for its region.
- In each Province, the Provincial Health Department (PHD) and the Provincial AIDS Office (PAO) link the various VCCT services in their ODs with the Regional Hub.
- In ODs which have VCCTs, all components link to the designated OD VCCT hub - this is usually at the referral hospital (RH). NGOs, clinics, health centres and private practitioners can link to the OD hub. Some of these may provide pre- and post- test counselling services only, and send the client, or his/her blood sample to the OD VCCT hub for actual testing. Others may provide the full service, and simply send their reports to the OD VCCT hub.

9.3 Mechanism for Linking in the Network

There are three main mechanisms for linking in this network:

- Within the Province
- Within the OD, and
- Between the Regional Hubs.

Within the Province:

All counselling and testing services must be licensed with the MoH; this will be registered at the PHD. So the PHD will keep a list of all official testing and counselling services in each OD within the province. The PHD should:

- Keep a list of all official testing and counselling services in each OD
- Hold quarterly meetings of all official testing and counselling services in each OD to monitor progress, review problems, establish training needs, coordinate issues, and link to the Regional Hub.
- Coordinate with the Regional Hub for supervision, training, quality control, etc.

Within the OD:

All counselling and testing services will:

- Register and coordinate with the OD VCCT hub to ensure that the components of the counselling and testing are covered: eg. results of tests get sent to the right place; post-test counselling is available when results come back; supportive counselling is available for positive results; pre-test counselling is given before blood is taken for testing.
- Keep records and make reports accurately, according to the standard MoH formats and systems

Between the Regional Hubs: All VCCT regional Hub should conduct regular meeting in order to share and learn their experiences and solve problems happening in their activities. Each VCCT center under regional hub, should be ready in identifying the problems and prepare lesson learnt to raise in the meeting. The meeting should be conducted in quarterly basis in the VCCT regional hub and every 6 months to 1 year in national.

9.4 Referral

9.4.1 Referring TO VCCT

- Outreach programmes, home-based care programmes, counselling programmes, STI clinics, support groups, OPDs and health centres, who meet people who want testing or counselling, who are suspected of being infected, or who have high risk behaviour and may need testing and counselling;
- In-patients in hospitals, who might have clinical signs and symptoms which suggest that testing (and of course counselling) might be helpful for their management;
- Women at ante-natal clinics who might want, or need counselling and testing, particularly to protect their un-born children;
- Patients in TB/DOTS programmes, who may need testing and counselling in view of their TB infection;

9.4.2 Referring FROM VCCT

- Clients who describe risk behaviour can be referred to an outreach programme or counselling programme for behaviour change help;
- Clients who test positive can be referred to institutional (RH) or home-based care programmes;
- Pregnant women who test positive can be referred to PMTCT programmes

- **Clients in need can be referred to support services (social, health, etc).**

9.5 Procedures for Linking in the Network

Whenever a client is referred for counselling and/or testing, or whenever a client requests counselling or testing, at any point in the VCCT referral network:

- he/she is given a VCCT referral card;
- the number of the card and the client's basic details (age, sex, etc) is recorded in the VCCT Referral Register.
- The client is then referred to the most convenient place for counselling and testing.

- Whenever a client attends for counselling and testing, the number of the card is recorded in the VCCT Central Register. Any further referral is also noted in the register.

- Whenever a client attends at that further referral, with the card, the card number and the further services provided are recorded in that service's VCT Register.

- Once a month (or once a quarter), each member/part of the referral system sends a list of all cards issued or seen to the central VCT Registry.

- The central VCCT Registry collates the data from these reports, analyses them, and sends this report back to all members of the system.

- Any member of the system can check any other member's register to identify card numbers they know, or want to follow up on.

10. COSTS OF VCCT

Costs of VCCT can be divided into **set-up costs** and **running costs**.

10.1 Set-up costs:

These are the costs incurred by NCHADS or a partner in establishing a new service. From NCHADS experience they are estimated to be as below.

Renovation: approximately \$5000 depending on location.

Equipment: approximately \$ 5000 (see reference on page 10)

Training: approximately \$1000 (for 2 counsellors and 2 laboratory technicians)

10.2 Running costs:

These are the costs needed to keep the service functioning well. From NCHADS experience they are estimated to be as below, for ONE YEAR.

Reagents:	\$3000
Consumables:	\$1000
Refresher training:	\$1000
Reporting:	\$60
Admin Cost:	\$360
Monitoring & Supervision:	\$720

11. QUALITY CONTROL FOR HIV TESTING

11.1 Various aspects of Quality control

In spite of the availability of excellent rapid tests, the reliability of the test results depends on their correct use; misdiagnosis may have severe consequences for individuals and for communities as well. Quality monitoring and evaluation of testing is thus very important.

Systematic and continuous quality monitoring and evaluation of the testing procedures include:

- **Quality Assurance (QA):**
This is the total process monitoring that guarantees that the final results reported by a laboratory are as accurate as possible. It includes inspecting specimens, reviewing identification measures, using reliable tests and verifying reporting. Quality assurance should be in place during the whole testing process from the moment a person requests to be tested to providing the test results. QA provides evidence of good performances, comparability and cost-effectiveness of the HIV AIDS testing. QA helps prevent laboratory mistakes and ensures continuous improvement in testing
- **Quality Control (QC):**
This is part of quality assurance. The process of QC consists of controlling the operational techniques in each test run, and verifying that the test is working properly. It includes controlling the correct storage conditions, temperature and timing conditions as well as kits' status control (packaging, readability of the test). The QC process will indicate whether the test run is technically valid and produces acceptable results. The QC process does not assess whether the results have been correctly reported.
- **Quality Assessment (EQA):**
This a means of determining the quality of results. It is the evaluation of a laboratory's performance, using proficiency panels and an external reference laboratory.

- This process will regularly retest samples (already tested in the laboratories to be evaluated) in another reference laboratory. This reference laboratory retests the samples using both identical and different tests and techniques. The results will be then compared to those given by the laboratories and analysed.
- A second type of assessment measure will be to distribute a given number of samples (of known serologic status) to be tested in the laboratories. The results given by the laboratories will be checked against the reference laboratory results.

11.2 Organising and Managing QC

Quality Control has to be established systematically and in parallel at all testing levels and for all techniques involved: from the viral load and CD4 count machines in referral hospitals to the rapid testing procedures in OD laboratories.

The QC process should involve:

Regular supervision visits and reporting. These QC supervision visits should be organised at regular intervals and dates to informed laboratories; but these laboratories should also be randomly checked in unannounced visits. A log books of the supervision visits and results should be kept at referral level and results comparatively analysed within the province and at country level. The supervisor should assist and check on the testing procedures.

At laboratory level: all operational techniques and tasks should be regularly reviewed and discussed with the lab technician and the responsible persons as well as with the reference level partners.

Log books: should be used to monitor:

Testing conditions and supplies

- Inventory, shelf-life check up (use of older stock first, orders made at regular dates,etc.) test kits lots numbering, and status of packaging;
- Storage and room temperature;
- Testing area, space, conditions of security, appropriate availability of supplies;
- Universal Precautions (UP) procedures and supplies.

Testing process

- Test methodology;
- Availability of procedure manual, that is clear and understood, or alternatively, of appropriate and specifically designed process information sheets (posted in the testing area, for example);
- Interpretation of results: the log book should record any question on test technique, or test interpretation difficulties. The laboratory technician should know where to call for help if in doubt;
- Encourage the laboratory technicians to report on any difficulties they may have.

After testing

- Cleaning and disposal, biohazard prevention measures;
- Implement communication systems to ensure reporting by the laboratory technicians on technical difficulties they may have encountered and problem solving through contact with the supervision system;
- Regular update and discussion on the testing methods with the lab technicians;
- Appropriate analysis and feed back to NCHADS of the testing QC;
- Discuss UP (Universal Precaution) and PEP (Post Exposure Treatment) with technicians;
- Keep them informed on their performances.

Different tests will have their specific QC methods. Every test should be provided by the suppliers with a full QC methodology and references. As much as possible the tests should be harmonised and their implementation comparatively analysed at country level.

As part of the QA, the QC should be planned, budgeted, with appropriate capacity human resources allocated specifically for it.

QC as part of QA may improve and bring benefits that are far greater than the expenses incurred.