

Establishing a Public Health Laboratory System

The Namibian Experience

Background

Namibia

Population: 2,259,000

Size: 825,418 km²

Estimated prevalence of HIV+ adults : 13%

Public Hospitals: 34

Public Health Centers: 43

Public Health Clinics: 260



BACKGROUND

- NIP established by Act of parliament in 2000 to provide and sustain quality medical laboratory services throughout Namibia.
- However no clear mandate on Public Health Lab functions
- Private Medical Labs and other non- medical labs exist with no clear PHL mandates
- WHO advocates for the strengthening of public health laboratories in the WHO African Region

BACKGROUND

- Request from the MoHSS to CDC/APHL for an assessment of the situation in the country in 2008
- Assessment conducted and completed by APHL in December 2008
- The GRN, through the MoHSS' s National Health Policy framework 2010-2020 proposed the establishment of a National Public Health Laboratory

Why a National Public Health in Namibia?

- Various public health threats:
 - HIV AIDS
 - Polio
 - TB and Drug Resistance TB
 - Measles
 - Cholera
 - Anthrax
 - H1N1
 - Hemorrhagic fevers:
 - Rift valley fever
 - Crimean Congo

Why a National Public Health in Namibia?

- NIP limited mandate and resources
- Heavy reliance on South Africa to confirm PH related diagnostic
- Delay in getting confirmation of epidemic prone diseases
- National Security
- IHR
- IDSR
- Compliance with various resolutions (WHO, SADC,....)

Why a National Public Health in Namibia?

- Strong Public Health Lab System to support Public Health Programs
 - Disease control and prevention
 - Early identification of Public Health Threats
 - Prevention of Diseases spread
 - Providing timely information for clinical decision making
 - Providing data for programmatic and policy decision making

Therefore

The Ministry of Health and Social Services (MoHSS) must devise an overall strategy for Public Health Laboratory services including surveillance and outbreak response testing, referral testing and coordination of all testing services that are relevant to the public health and managing disasters. The MoHSS must thus assess the need for a Public Health Laboratory

Minister of Health of Namibia Calls for Strong Public Health Laboratory Systems

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THE NAMIBIAN



News from the
Polytechnic of Namibia
28 October 2011
www.polytechnic.edu.na
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Minister calls for strong public health lab system



Right: Dr. Richard Kamwi

The Minister of Health and Social Services, Dr. Richard Kamwi, has called on health professionals to establish a strong public health laboratory system in the country since such a system is critical for addressing major international health challenges, including the HIV/AIDS pandemic and extremely drug resistant variants of tuberculosis (TB).

Kamwi was speaking at the opening ceremony of the fifth George Washington University (GWU) and the Association of Public Health Laboratories (APHL) seminar held at the Polytechnic this week, the first ever to be hosted on the African continent and outside the United States.

"A strong health laboratory system is essential [for] building an effective early warning system for disease outbreaks as well as [for] guiding cost-effective health policy planning and interventions," he emphasised.

The Minister said that the system, once established, should be based on promoting awareness of the causes of diseases and the benefits of lifestyle changes. The system would also include improved surveillance, monitoring and evaluation mechanisms. "As Government, we are concerned that incidences of diabetes, hypertension, cancer and cardiovascular diseases are on the increase. Data on these diseases

***"As Government, we are concerned that incidences of diabetes, hypertension, cancer and cardiovascular diseases are on the increase...which is why it is imperative to establish such a system."* - Dr. Kamwi**

remain scanty at this stage and we have limited knowledge of their full socio-economic impact in the Namibian context, which is why it is imperative to establish such a system."

The Rector of the Polytechnic, Dr. Tjama Tjivikua, announced that the institution had agreed to host the seminar in order to provide senior directors of Namibian public health laboratories with training and networking opportunities in order to improve public health laboratory systems in the country. The seminar is being attended by professionals from fourteen countries across the globe,

including Ukraine, The Netherlands, The United States of America and African countries such as Sierra Leone, Kenya, Tanzania, Lesotho, Mozambique, Botswana and Zambia.

well as moral considerations," Tjivikua said.

He emphasized that the Polytechnic places a high premium on public health, as can be seen in the qualifications it offers in medical technology, public health and emergency medical care, and its investment of N\$160m in a new building for the School of Health and Applied Sciences.

Also speaking at the official opening of the seminar, Chief Executive Officer of the Namibia Institute of Pathology, Tangeni Angula, said that providing

maintaining health standards should be every government's concern as [good] health, at an individual level, can directly increase general output through reduced sickness and labour productivity," Angula said.

The Dean of the School of Health and Applied Sciences at the Polytechnic, Professor Sylvester Moyo, thanked the Association of Public Health Laboratories (APHL) for its continued efforts in providing a focused resource of education and training to public health laboratory professionals in



Participants in the seminar listening attentively to one of the presenters.

training to health professionals will enable them to get the skills needed

developing countries such as Namibia. He said APHL's commitment will

Enablers

- WHO Afro resolutions on NPHL
- Lab management and leadership trainings
- MoHSS/NIP leadership
- MOHSS Policy and Strategic Plan
- Restructuring of the MOHSS
- CDC financial and technical support
- APHL technical support

Situation Analysis

Assessment of Public Health Laboratory Services in Namibia

- Present information on the role and functions of public health laboratory networks
- Discuss with public health laboratory leadership
- Conduct a high level environmental scan of Namibia's laboratory resources that are or could be of relevance to the public health system
- Provide recommendations to assist Namibia in strengthening the public health laboratory services

Situational Analysis

<p>STRENGTH</p> <ul style="list-style-type: none">• MOHSS Strategic Plan in development and process moving ahead expeditiously• Visionary leadership at MOHSS and NIP• Innovative organizational relationship of NIP• Quality independent laboratory services for blood banking, water testing, veterinary testing• Developing strong educational program for laboratory sciences• Commitment of government to accessible, affordable services	<p>WEAKNESSES</p> <ul style="list-style-type: none">• Strategic alliance between MOHSS and NIP not yet clearly defined and lacks driving force from MOHSS• Problem solving of identified issues between MOHSS and NIP• Incentives and employee activities are not aligned to the Performance Plan agreed to by MOHSS and NIP• Lack a national strategic laboratory plan, and thus lack a definition of the roles and functions of the National Public Health Laboratory for MOHSS, and a defined organizational structure• Disease reporting activities are not adequately staffed, monitored and enforced resulting in delayed reporting• National pre-service training capacity cannot meet workforce needs
<p>OPPORTUNITIES</p> <ul style="list-style-type: none">• The strategic alliance that was created by legislative act to form NIP can be an engine for creating value and quality laboratory services for Namibia• Educational capabilities exist to develop adequate capacity to meet the national needs for laboratory services workforce	<p>THREATS</p> <ul style="list-style-type: none">• Private laboratory sector competition with NIP• NIP capacity doesn't develop sustainability and growth to meet MOHSS needs

Disease Prevention, Control and Surveillance

Situation

- Limited in country Lab capacity
- No systematic Lab surveillance
- Limited local expertise
- Heavy reliance on NICD

Recommendation

- Build in country Lab capacity
- Collection of basic Lab info
- Strengthen specimens logistics

Integrated data management

Situation

- >80% Medical Lab data in NIP LIS
- All Vet diagnostic data at CVL
- Data on water and food testing available at Namwater and City of WDH
- Private Labs hosting Lab data
- NIP LIS not linked to MoHSS

Recommendation

- Strengthen LIS in all NPHLS Labs
- Link all Lab databases to NIP DR
- Link NIP DR to MoHSS

Reference and specialized testing

Situation

- Engage all other Labs in country

Recommendation

- Conduct thorough assessment
- Build capacity as necessary

Environmental Health, Protection and Food Safety

Situation

- Local capacity at NAMWATER, City of Windhoek, Breweries, Dairies Labs
- Existing Units within MoHSS

Recommendation

- Engage NAMWATER and City of Windhoek Labs
- Engage MoHSS Units

Public Health Laboratory Systems Strengthening Project

- Strengthen the Lab committee chaired by MOHSS
- Development of a National Lab policy
- Development of a National Lab Strategic Plan
- Coordination of fragmented Lab testing services
- Provide minimum standard of practice for all medical Labs
- Legislate and regulate medical Lab services
- Establish and effective Disease Surveillance System
- Development of a Laboratory workforce

Integrated Public Health Laboratory Committee(IPHLC)

- **Membership:**

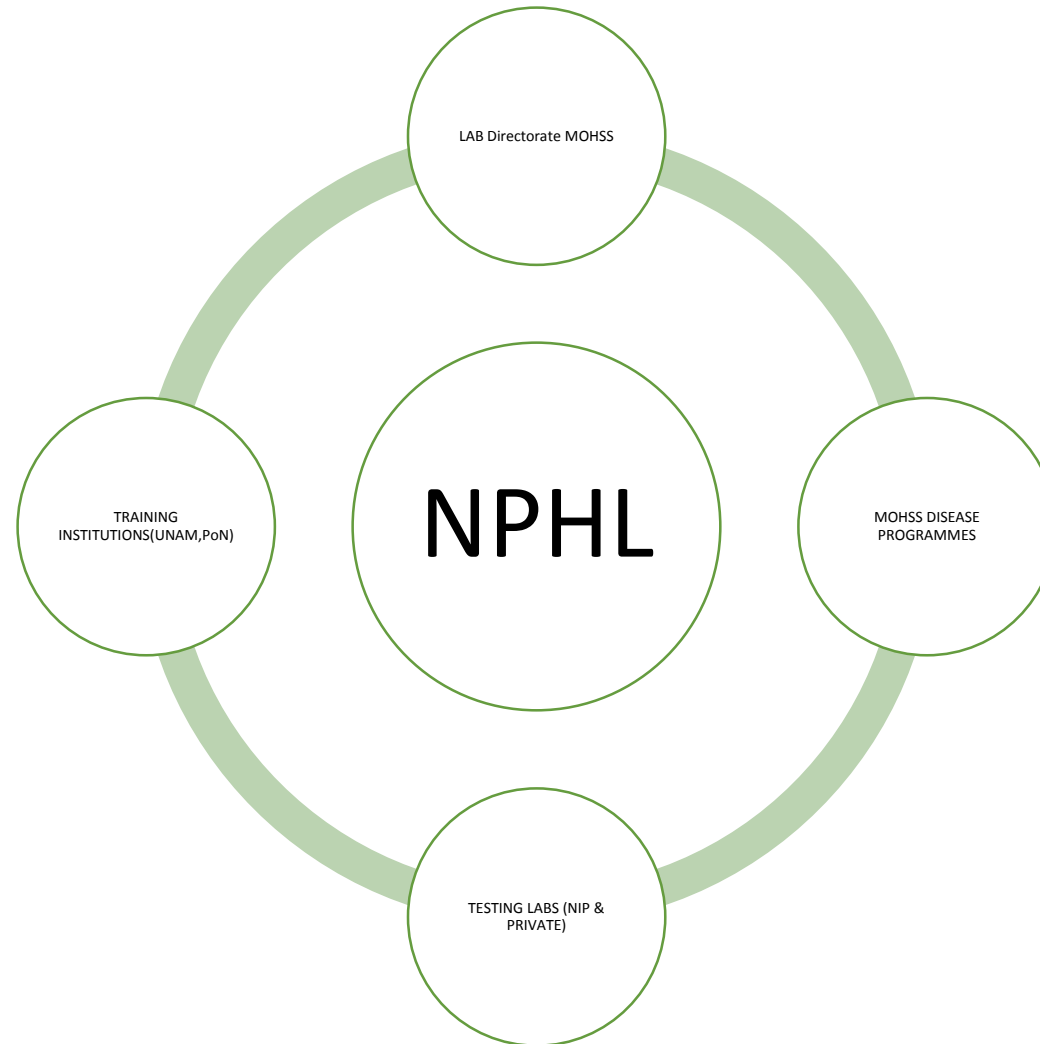
- Namibia Blood Transfusion Services (NAMBTS)
- NAMWATER
- Ministry of Fisheries
- Veterinary Laboratory
- The Army Laboratory
- PATHCARE
- CPC Laboratory
- CLINPATH Laboratory
- MAXI Laboratory
- OSHANA Laboratory
- UNAM
- SCMS
- CDC
- Polytechnic of Namibia
- NIP

Policy and Strategic Plan development

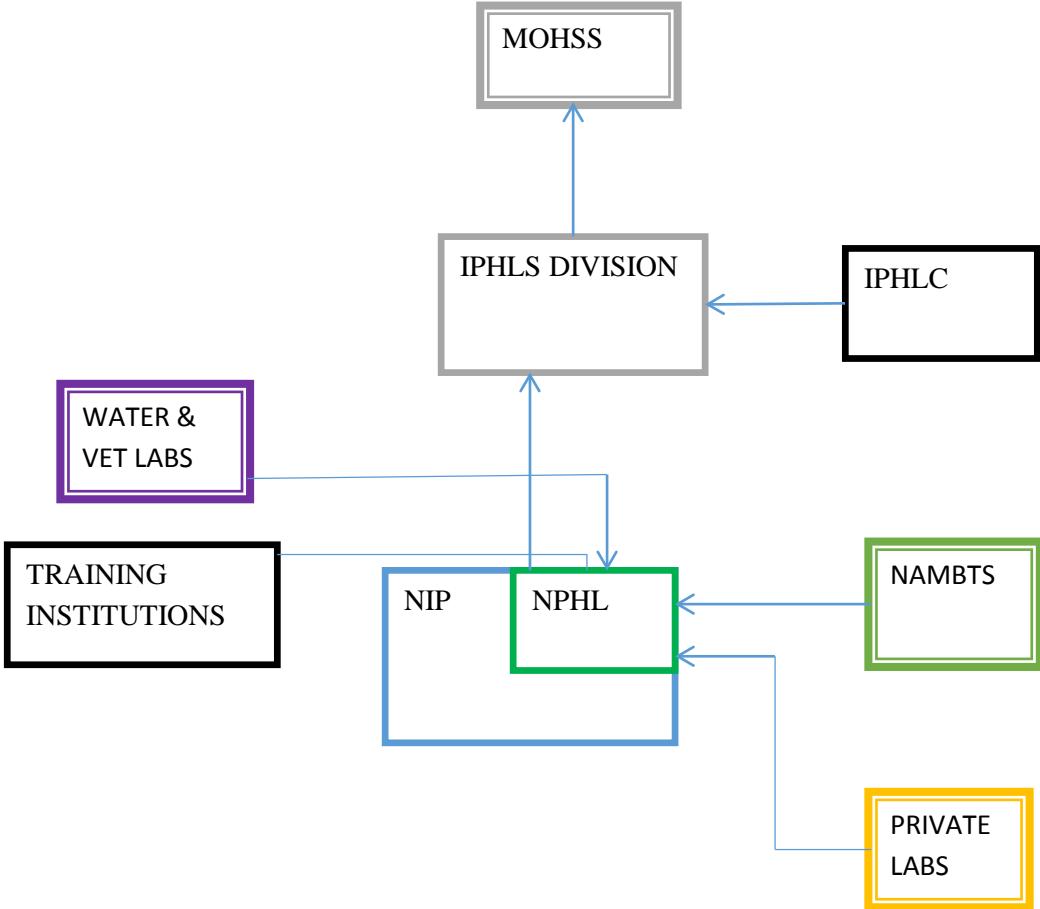
Development of NPHL policy and Strategic Plan

- Consultation by APHL
- Quarterly review meetings
- Presentations at MoHSS management meetings
- Cabinet approval
- Policy and SP launch
- Motivation for inclusion in the MoHSS capital budget
- Building NPHL
- Human Capacity Development

Namibian NPHL System



MODEL A



Model A: NPHL housed within NIP

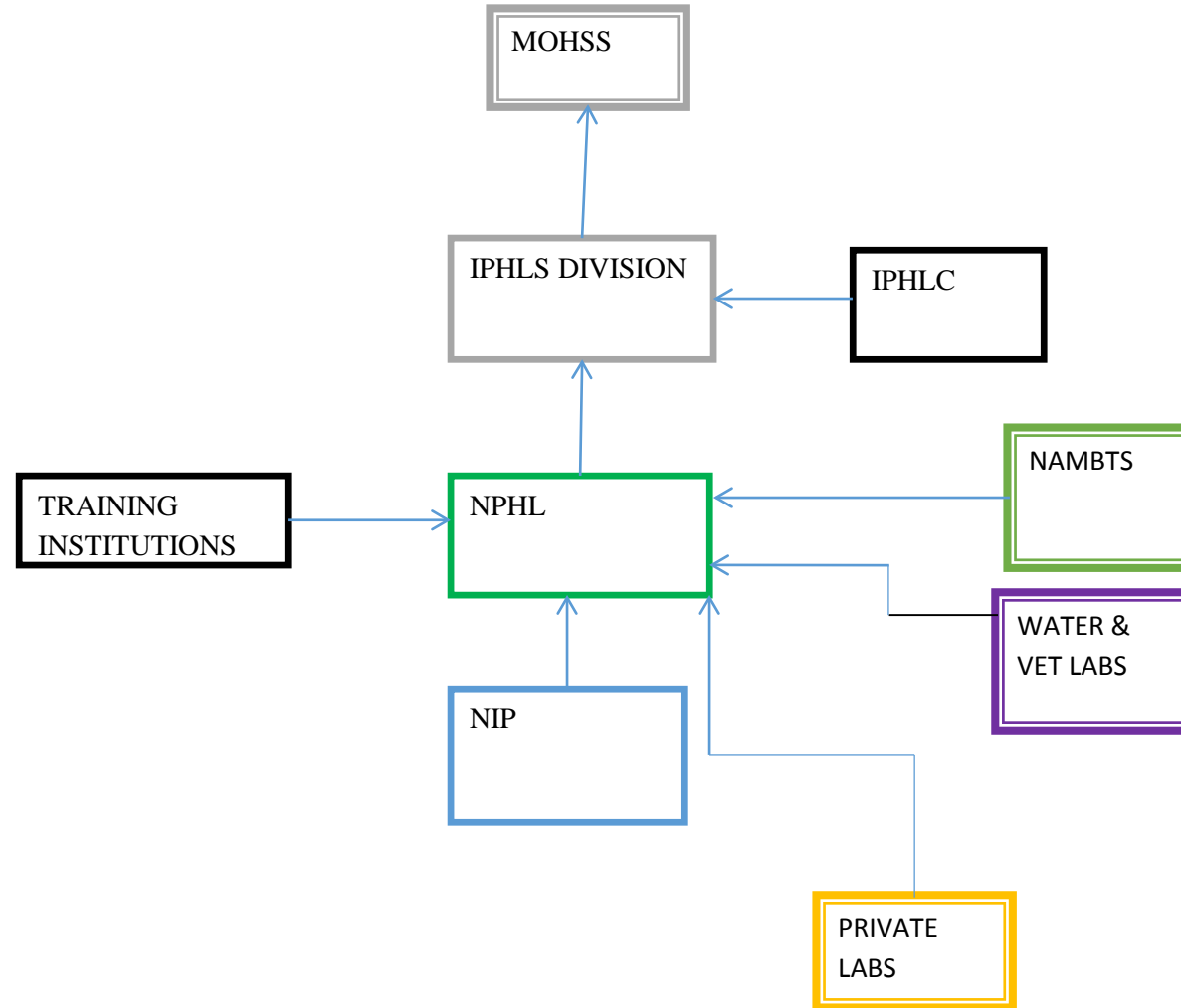
Advantages

- Existing NIP infrastructure, HR and testing capacity
- Low initial cost
- Existing SLA with NIP

Risks

- PHL function competing with NIP core clinical Lab function
- Perceived challenges with some stakeholders (private labs)

MODEL B



Model B: new entity within the MoHSS

Advantages

- Own organizational and management structure
- National Asset
- Coordinate all the Laboratories
- No perceived conflict by private Labs

Risks

- Heavy initial investment
- Loosing existing NIP expertise
- HR

Implementation

S e c r e t

Cabinet Action Letter for Verification

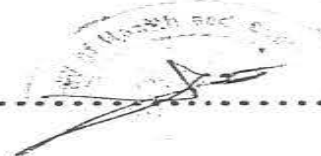
**SUBJECT: THE NATIONAL PUBLIC HEALTH LABORATORY
POLICY DOCUMENT**

Sponsoring Ministry: Health and Social Services

Cabinet Resolutions:

1. That Cabinet authorize the Ministry of Health and Social Services to establish a National Public Health Laboratory Policy System; and
2. That Cabinet authorize the gazetting of the said Policy.

Draft Cabinet Action Letter Verified by:..... Date:.....



14.12.2012

Official Launch of the NPHL Policy



REPUBLIC OF NAMIBIA

MINISTRY OF HEALTH AND SOCIAL SERVICES



National Public Health Laboratory System

Implementation Plan

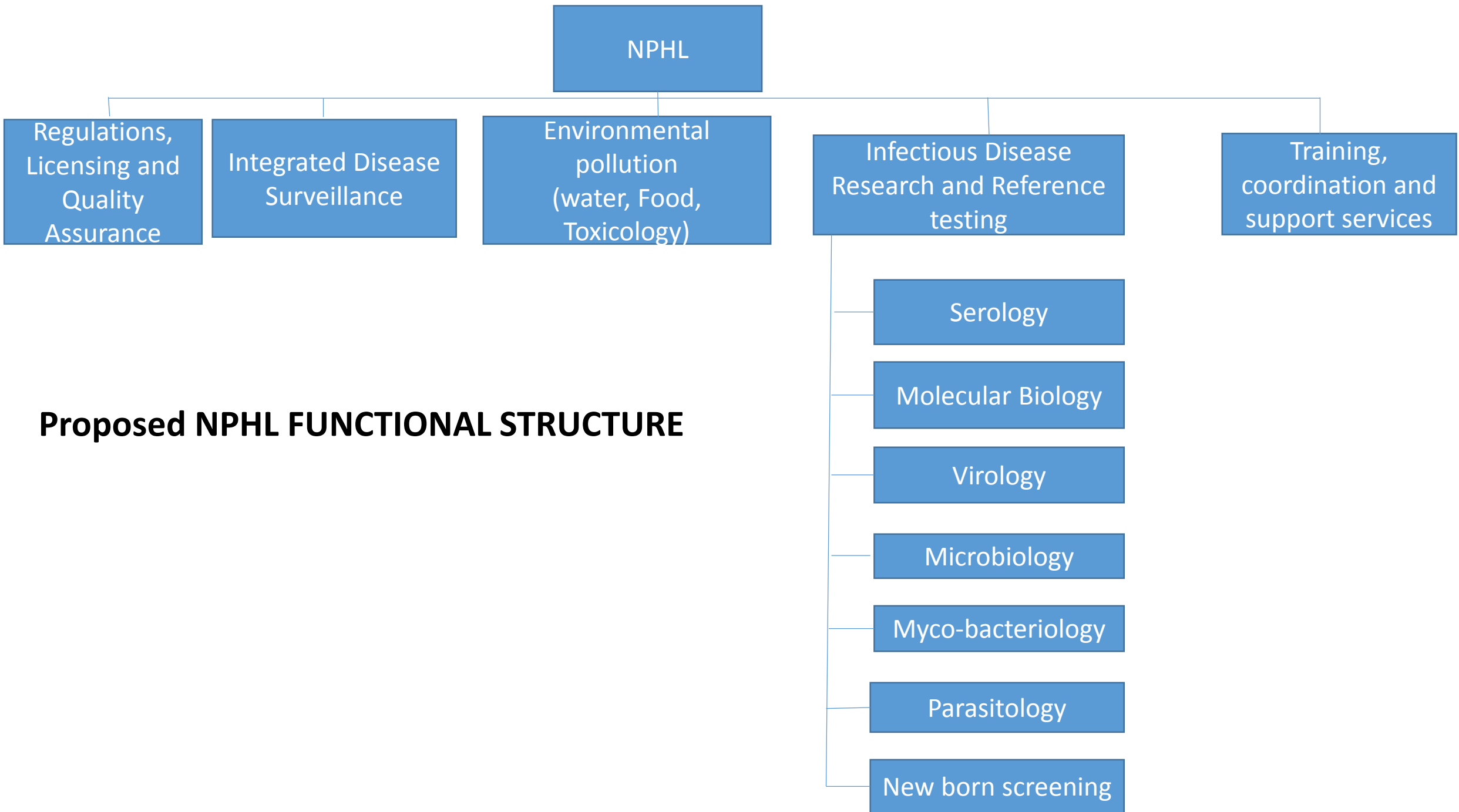
2013-2018

Service Level Agreements (SLA)

- Amendment of the existing SLA with NIP
- Service Level Agreements with non-MOHSS Laboratories
 - Central Veterinary Laboratory
 - City of Windhoek Laboratory
 - Forensic and Toxicology Laboratory
 - Polytechnic of Namibia
 - University of Namibia
 - Namwater Laboratory
- SLA with private medical Laboratories

Memorandum of Understanding with

- CDC
- NICD/NHLS
- SADC Reference Laboratories
- WHO collaborating Centers
- National and International Public Health Laboratories





National Public Health Laboratory