African Society for Laboratory Medicine

Building an Effective Laboratory Biosafety Response in Africa
ASLM Strategic Vision for Africa in 2020 - 4 Major Goals

**Vision**

Improve healthcare in Africa by strengthening laboratory services

**Mission**

Advance professional laboratory medicine practices, science and networks in Africa

**Goal 1 – African Laboratory Workforce Development**

Certify 30,000 laboratory professionals /technicians

**Goal 2 – Laboratory Accreditation**

Enroll 2,500 laboratories in the WHO SLIPTA and assist 250 laboratories to achieve accreditation

**Goal 3 – African National and Regional Regulatory Environments**

Raise regulatory standards in 25 countries and to enable harmonized regulation of diagnostics in the 5 economic regions of Africa

**Goal 4 - African Network of National Public Health Reference Laboratories**

Develop national public health reference laboratories in 30 countries
Key ASLM achievements to date

• **WHO-AFRO SLIPTA Program.** Partnered with WHO-AFRO to implement the WHO-AFRO SLIPTA program. To date 160 labs audited across 22 African countries

• **African Public Health Laboratory Network.** Established an unprecedented pan-African network of national public health reference laboratories in 30 countries across Africa

• **Political Advocacy.** Led a Ministerial Call to Action for Laboratory Strengthening signed by one third of African countries

• **Diagnostics Access Initiative.** Partnered with UNAIDS to launch the Diagnostics Access Initiative to achieve new 90-90-90 HIV treatment targets

• **GLI-Africa.** Partnered with WHO and GLI to launch a Laboratory Initiative for improved TB diagnostics for Africa
MINISTERIAL CALL FOR ACTION

- STRENGTHENING LABORATORY SERVICES IN AFRICA -

We, the undersigned Ministers of Health from African countries, attending and meeting at the 1st International Conference of the African Society for Laboratory Medicine (ASLM), Cape Town, South Africa, December 1st th, 2012 under the theme “Accurate Laboratory Diagnostics – A Pillar of Quality Health Care”
ASLM, Biosafety and Global Health Security

• ASLM leads a CDC-supported laboratory Global Health Security Agenda response across 17 countries
• ASLM network of GHSA implementing partners, e.g.
  ▪ Institute Pasteur, Senegal
  ▪ Cheikh Anta Diop University, Senegal
  ▪ Institute of Human Virology, Nigeria
  ▪ Global Health Systems Solutions, Cameroon
  ▪ Resaolab, Burkino Faso

• ASLM GHSA experts, e.g.
  ▪ Amsterdam Institute for Global Health Development, APHL, Public Health Agency of Canada, Riders for Health
BIOSAFETY
THE ASLM RESPONSE
1

Sustainability
Strengthening Systems For Multiple Disease Prevention and Control

Laboratory Systems

Quality Management
Workforce Development
Biosafety & EQP Maintenance
Supply Chain Management
Laboratory Information
Sample Referral
Facilities/Policies

Laboratory Services

Serology
Molecular Testing
CD4
Chemistry
Hematology
Culture
Microscopy

Sustainable health systems for access and equity
What is needed?

• **Standards**
  – Clear definition of laboratory biosafety standards and mechanisms of accountability (WHO, CDC, IFBA)

• **Investment case**
  – Develop the investment case and sustainable financial models for biosafety programs

• **Funding**
  – Incorporate biosafety requirements into national laboratory strategic plans and budgets
“Institutionalized” biosafety

• Through its network of partners, ASLM is supporting
  – An update of laboratory network requirements to meet GHSA priorities
  – An update of national laboratory implementation plans in 17 African countries.

• These plans will incorporate a focus on biosafety and are the basis of national operational plans and budgets.
2

Measuring Gaps
Biosafety Assessment

- Standard, objectives measures of biosafety capacity and compliance need to be routinely implemented

- ASLM and its partners are developing a graded scorecard of laboratory network GHSA functionality and readiness based on WHO and other assessment tools

- The tool will be used to identify gaps in biosafety capacity across laboratory networks in African countries
3
Fill Gaps
Biosafety risk exists at all levels of the health system but capacity is unequally distributed.
ASLM Community Laboratory Initiative

• ASLM and partners are developing a training package for community and lay health workers

• The training focuses on the core elements of biosafety for safe sample collection, packaging and shipping

• The training will be piloted by end 2015 and implemented in at least 3-5 countries in 2016
Biosafety cabinet certification

• The majority of biosafety cabinets in African public health laboratories are not routinely serviced and certified

• Certification skills and maintenance spare parts are concentrated in South Africa, mainly in the private sector

• A classic “supply and demand” problem
Biosafety cabinet certification

• ASLM is mapping certification capacity across Africa and investigating mechanisms to reduce the imbalance:
  – Training certifiers in gap areas and building a mentorship program in collaboration with the private sector
  – Developing an accessible database of BSC certifiers
Awareness
Awareness

• Behavior change is the core of successful biosafety programs

• However, compliance with biosafety standards is low amongst healthcare workers
Awareness

• ASLM uses its communications platform to build biosafety awareness amongst large numbers of healthcare workers
  – E-mail communications to 15,000 healthcare professionals in Africa and elsewhere
  – Quarterly Lab Culture and GHSA Newsletters
  – Scholarly articles in African Journal of Laboratory Medicine
  – Social media discussions on Twitter, Facebook

• Biosafety trainings
  – Accra October 26-30: Regional Biosafety Workshop hosted NMIMR and supported by the CDC Influenza Division
  – Biannual ASLM conference workshops and seminars
Thank You