

The European Security and Defence Union



Healthcare systems in Europe – time to innovate!

The role of digitalisation in a post Covid-19 world



Time for a stronger European Health Union

Stella Kyriakides,
Commissioner for Health & Food Safety, European Commission, Brussels



After the pandemic is before the next

Prof Dr Ulf Dittmer,
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A mobile lab offensive for Africa

LABPLUS AFRICA – partnering against new emerging pandemics



photo: Praesens Foundation

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As part of its Covid-19 response and under the umbrella of the EU Centres of Excellence for Chemical, Biological, Radiological and Nuclear risk mitigation (EU CBRN CoE), the EU is launching the LABPLUS AFRICA offensive.

Between now and 2023, this programme will implement an innovative approach to build an outbreak management training centre and address unmet needs of quick and affordable diagnostics and health services. It will include a fleet of mobile laboratory platforms to detect, respond, control and prevent epidemics in Africa, in particular in remote and hard-to-reach areas.

Supporting the EU Coronavirus Global Response and the Security and Development Policy of the European Commission's Directorate General for International Cooperation and Development (DG DEVCO), the programme presents a series of scientific activities, preparedness and training measures aimed at strengthening and empowering the African preparedness and response to Covid-19 and future emerging pathogen outbreaks on the continent.

The EU's global solidarity

The unprecedented Covid-19 crisis clearly reveals the need to reinforce capacities in terms of diagnostic testing, outbreak surveillance, containment and surge capacity. Therefore, the EU is showing its global solidarity with partner countries under the leadership of the EU CBRN Centres of Excellence.

The objective is to make a fleet of five Mobile Labs available in a regional approach to countries in need, to reinforce local healthcare delivery from medical (diagnostics, therapeutics, vaccination campaigns,...) and non-medical (health promotion, social mobilisation) services at the peripheral level of the health system. These European state-of-the-art Mobile Labs,

produced by Praesens Care, bring together the best class of European technologies and partners. They are all-terrain truck-based, autonomous biosafety laboratories providing health programmes across the patient journey, from prevention to care, to patients in hard-to-reach regions with extremely limited healthcare infrastructure. Quality healthcare services will be offered through this new delivery model with integrated routine diagnostic services (multi-disease testing and real-time reporting), primary healthcare and community engagement.

Empowering local health systems

The programme to increase mobile laboratory capacities run by trained African teams are integrated into the local health systems. An African Centre of Excellence located at the Institut Pasteur de Dakar will provide high-level and innovative training in surveillance and epidemic preparedness, intelligence, response and control. Operations will start in Senegal, west and east Africa, but overall, this initiative will reach a large number of African public health and research institutes. This innovative solution has the potential to be scaled globally, bringing field-proof solutions to patients that are traditionally underserved. It will also empower this vast African region to develop key African scientific and public health capabilities of its own. Thus, this impactful programme directly reinforces the long-term partnership agreement between Africa and Europe. Endorsed by the local ministries of health and in partnership with local implementation partners, this fleet will be embedded within the current healthcare system and will complement the already existing capacities. The Mobile Labs can be operated in regional hubs for personnel shifts, resupply and maintenance purposes. Patients are screened on the spot, samples of suspected cases collected, tested and confirmed in the Mobile



LABPLUS AFRICA

The programme will be implemented by the International Science and Technology Centre (ISTC), located in Kazakhstan. The consortium will rely on the successful partnership between Praesens Care (PC) and the Institut Pasteur de Dakar (IPD) that started in June 2017 and produced a proven record of achievements and generated significant public health impact. This new programme aims at greater patient impact on a larger scale, placing communities at the core of care.

On the request of the Senegalese Ministry of Health, one of the IPD-Praesens pilot Mobile Labs has recently been equipped with Covid-19 diagnostic testing capabilities. It is currently deployed under the leadership of the IPD Dakar in Touba, Senegal, and has been actively testing patients since the start of the epidemic.



Laboratory with biosafety level 3 (BSL-3) facility at Institut Pasteur de Dakar where patients samples are handled for the diagnosis of SARS-CoV-2
photo: Institut Pasteur de Dakar

Lab as close as possible to the patients. Beyond addressing the infrastructure and hardware needs, it will include a complete package of training, maintenance, and as such will contribute to real capacity building efforts in-country that will last beyond the Covid-19 crisis, while also addressing other highly needed health programmes like HIV, TB and Malaria.

The role of Dakar's Institut Pasteur

Acting as a Covid-19 diagnostic regional reference laboratory for the World Health Organization (WHO), the West African Health Organization (WAHO), and the Africa Centres for Disease Control and Prevention (Africa CDC), the Institut Pasteur de Dakar (IPD) organised two training workshops in February

2020 for more than 50 biologists from 23 African reference institutions in Dakar, as well as onsite training in Rwanda and Burkina Faso. To improve the diagnostic accessibility throughout the continent, the Africa CDC used the IPD as a logistical hub to distribute more than 3,2m Sars-CoV-2 diagnosis kits and reagents in 50 African countries. The IPD is also responsible for diagnosis in Senegal, confirmatory diagnosis in Africa as well as being the reference sequencing institution for Sars-CoV-2 isolates. In Senegal, in addition to the central laboratory in Dakar, the IPD deployed six decentralised laboratories in six major cities to better cover testing in remote areas. Among several international responsibilities, the IPD is evaluating diagnosis kits distributed in Africa.

Dr Rudi Pauwels



Photo: Praesens Foundation

is a pharmaceutical scientist and serial biotech entrepreneur with a 35 years successful career in both academia and the biotech/pharmaceutical industry (Tibotec-Virco, Galapagos Genomics, Biocartis, etc.). His research and entrepreneurial choices were essentially driven by his views on current and future medical needs. He is Founder & President of the Praesens Foundation that addresses the needs for better preparedness and response to disease outbreaks.

Dr Christophe Peyrefitte



Photo: private

has been serving since January 2019 the Institut Pasteur de Dakar in the Scientific advancement along with Research and Development programmes. He previously led the virology research unit of the French Armed Forces Biomedical Research Institute and acted as NATO French representative in CBRN-Med working groups. He was involved in the Ebola outbreak response coordination in Guinea and investigated viral outbreaks in Africa, French West Indies. His research aimed at developing medical counter measures against hemorrhagic fever viruses, Orthopoxviruses and arboviruses.

Eng. Tristan Simonart



Photo: National authorities of Uzbekistan

has been serving since 2013 the European Commission in the implementation of the EU CBRN Centres of Excellence programme. He previously led the EU CBRN-E security research programme (FP7-H2020) and acted as liaison officer. Before 2008 he headed the water and environment service of the Pasteur Institute in Lille, coordinated EU and NATO funded activities on water quality and bioterrorism in Central Asia, Russia, Lebanon and Turkey. He will take the lead of the European Union Civil Protection international team by the end of the year.