Intervention area: NCD Surveillance
City action: The use of a global surveillance tool to collect city-level data on NCD risk factors

Like many low- and middle-income countries, Benin has experienced rapid urbanization in the past five decades, with the urban population growing by 3.8% per year. Urbanization is contributing to the rise in air pollution and sedentary lifestyles, and its pace of growth is placing a strain on the country’s infrastructure and health services. These factors in turn influence the emergence and increase of environmental, behavioural and metabolic risk factors for NCDs.

Prior to 2007 there were no population data on NCDs in Benin, but in January 2007 the Ministry of Health acknowledged the growing burden of NCDs and created the Programme National de lutte Contre les Maladies Non Transmissibles (National Programme for the Control of Noncommunicable Diseases – PNLMNT). In the absence of a national NCD policy or action plan, advocating for better recognition of NCDs at all government levels was a high priority. One of PNLMNT’s first actions was to carry out a comprehensive risk factor survey. Due to insufficient funds for a national survey, a city-based survey was conducted in Cotonou – Benin’s largest city and economic capital.

The WHO STEPwise approach to noncommunicable disease risk factors surveillance (STEPS) was chosen for data collection. STEPS is a standardized instrument for collecting, analysing and disseminating data on NCD behavioural and metabolic risk factors. STEPS has three components: a questionnaire to gather demographic and behavioural data, physical health measurements, and collection of urine and blood samples. Survey coordinators can tailor the survey by choosing from a menu of core sections, expanded questions and optional modules. The flexible design of the instrument enabled the Ministry of Health through the PNLMNT to gather demographic and behavioural data on tobacco and alcohol use, dietary behaviour, physical activity, and history of
NCD conditions and lifestyle advice, in addition to prevalence of overweight and obesity, raised blood pressure, and raised blood glucose. The Cotonou survey also included optional modules on stroke and oral health as well as expanded questions on behavioural risk factors.

Conducting a survey in a city context presented challenges. Increased mobility of people meant that locating participants was sometimes difficult. Investigators faced challenges such as participants being unavailable for blood sample collection, with additional follow-up costing time and money. Participant willingness was also a challenge, including reluctance or refusal to provide blood samples. Other difficulties included participants’ understanding of the survey (as translation into local dialects was not always possible), and restricted access to some neighbourhoods because of flooding.

A comprehensive survey report summarized the survey’s findings, providing new insights into the prevalence of the most significant NCD determinants such as tobacco use, alcohol consumption, obesity and high blood pressure. The report made several recommendations, including extension of the survey to the rest of the country, national screening for risk factors, and multisectoral collaboration – including with the private sector and the establishment of a working group on NCDs with members from multiple government departments.

After a successful pilot at city level, a national survey was carried out in 2008. The risk factor survey formed part of a wider examination of the status of NCD risk factors in Benin and the provisions in place for diagnosis and treatment. Concerns were raised over the health system’s ability to cope with the NCD epidemic, given insufficient numbers of trained staff and a lack of specialized medical equipment. Lack of capacity for NCD prevention and control, in addition to the convincing statistics from the risk factor survey, led to the development of the first national NCD policy, followed by an integrated action plan for 2014–2018.

Collecting high quality NCD risk factor data was instrumental in instigating long-term action to reduce the burden of NCDs. Data collected in the national survey provided the baseline for national targets based on eight of the nine global targets from the WHO NCD Global Monitoring Framework. Political will to tackle NCDs is stronger than ever before, and PNLMNT plans to carry out routine national surveillance with a STEPS survey every 5 years, with the next survey planned for 2020.

---