

## Setting the Baseline for a Sentinel System for the Identification of Occupational Risk Factors in Africa

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**Abstract :** In Africa, environmental and occupational health risks are mostly underreported. The aim of this research is to develop and implement a sentinel surveillance system comprising training and guidance of occupational physicians (OC) who will report new work-related diseases in African countries. A group of 30 OC are recruited and trained in each of the partner countries (Morocco, Benin and Ethiopia). Each committed OC is asked to recruit 50 workers during a consultation in a time-frame of 6 months (1500 workers per country). Workers are asked to fill out an online questionnaire about their health status and work conditions, including exposure to 20 chemicals. Urine and blood samples are then collected for human biomonitoring of common exposures. Some preliminary results showed that 92% of the employees surveyed are exposed to physical constraints, 44% to chemical agents, and 24% to biological agents. The most common physical constraints are manual handling of loads, noise pollution and thermal pollution. The most frequent chemical risks are exposure to pesticides and fuels. This project will allow a better understanding of effective sentinel systems as a promising method to gather high quality data, which can support policy-making in terms of preventing emerging work-related diseases.

**Keywords :** sentinel system, occupational diseases, human biomonitoring, Africa

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