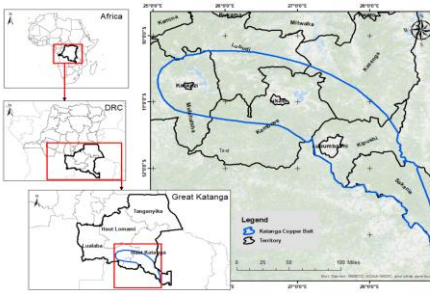
BRIEF

Health Impact Assessment of the National Strategic Plan for Universal Health Coverage 2020-2030 and its integration of the health and social protection needs of artisanal miners in Kolwezi/Lualaba, DR Congo[1]

October 2026

Key Messages

Health impact assessment (HIA) is an internationally recognised method to assess health impacts and recommend improvements to economic activities and policies. This brief presents the summary findings of a concurrent HIA on the implementation of the Democratic Republic of the Congo's (DRC) National Strategic Plan for Universal Health Coverage (UHCP) 2020–2030 (1) in its integration of the health and social protection needs of artisanal and small-scale miners (ASM), particularly focusing on Kolwezi, Lualaba. The HIA focused on three elements of the Plan,



Area covered by the HIA -Kolwezi city in Lualaba province, DR Congo Source: S Mukotanyi, 2026

1. Improving health service delivery and continuity of quality care at all levels of the health system;
2. Strengthening the *Health in All Policies* approach to reduce the disease burden and long-term sustainability of the UHCP;
3. Ensuring financial protection for ASM workers and surrounding communities.

The findings highlight within ASM communities:

- Persistent barriers to healthcare access, including inadequate health infrastructure.
- Limited screening and prevention of non-communicable (NCDs) and occupational illnesses.
- Exposure to mining-related pollutants, undernutrition and high food prices.
- Inaccessible or operationally limited formal health and social protection mechanisms.

The priority findings on impacts lead to recommendations for the UHCP and its implementation to:

a. Integrate ASM by expanding the minimum service package and NCDs/nutrition in ASM areas.
b. Raise ASM and informal medicine vendors awareness on avoiding self-medication and unregulated medicine suppliers, backed by service access improvements
c. Cross-sector expansion of infrastructures, safe road transport and local food production.
d. Including miners' organisations in local decision-making processes especially in health.
e. Expand health mutual aid and address barriers to ASM inclusion in health insurance
f. Earmark a portion of mining royalties to equip and upgrade public health centres and hospitals.

The Policy Context

Ordinance-law No.23/006 of 2023 established geographical accessibility standards under the DR Congo's UHCP, specifying maximum distances of 5 km to health centers (HC) and 40 km to general hospitals, alongside requirements for water, electricity and sanitation. However, these standards remain largely unmet in many areas and inadequate infrastructure, and limited availability, affordability, and quality of care persist (2). In DR Congo, law N° 18/035 of 2018 requires assessment of those involved in activities that produce toxic risks for health to prevent and control these risks, providing a mandate for a health impact assessment.

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The scope to strengthen implementation of the UHCP in ASM set the motivation for an HIA to assess their specific health needs and risks for inclusion as UHCP is progressively implemented. The intention is for the findings to be integrated into health planning, service delivery, and social protection mechanisms, to contribute to a more inclusive and responsive implementation of the UHCP and its positive health impacts in ASM communities.

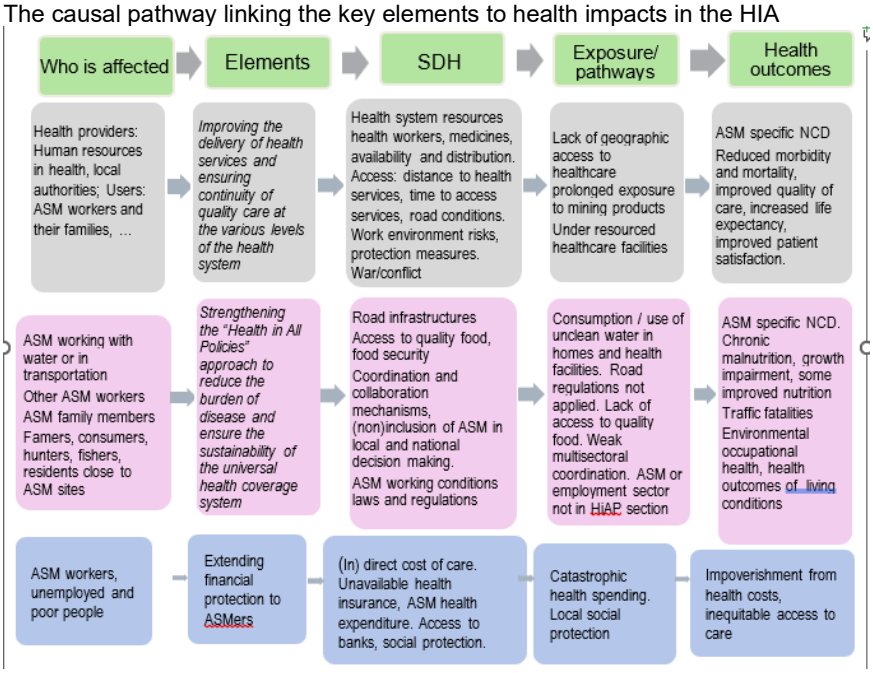
The Health Impact Assessment

With the UHCP already in process, this concurrent HIA, implemented between July and October 2026 during the 2026 EQUINET regional training programme on HIA, used an internationally recognised method: screening to identify causal pathways and focus of the HIA; scoping to identify the sources and forms of evidence; a profiling and assessment stage to identify the direction, magnitude, severity, likelihood and on this basis the significance of the health impacts assessed; and the setting of recommendations for significant impacts; and steps to report and communicate the HIA and propose areas for monitoring impacts and of implementation of the recommendations. From the screening and scoping stages, the HIA focused on three key elements:

4. Improving health service delivery and continuity of quality care at all levels of the health system;
5. Strengthening the *Health in All Policies* approach to reduce the disease burden and long-term sustainability of the UHCP;
6. Ensuring financial protection for ASM workers and surrounding communities.

A causal pathway shown in the figure adjacent was developed from background information and used as a framework for data collection The assessment drew evidence from UN databases, government and academic household surveys, and official ministry reports. Data gaps and limitations were addressed by key informant interviews in Kolwezi in 2025 and 2026 and in Kinshasa in 2025 as part of a separate the Policy Supporting Programme (PSP-Spring) and meetings with officials from health, mine and labour ministries, ASM cooperatives, and civil society organisations in Kolwezi. Triangulating from multiple sources of evidence gives reasonable confidence in the findings.

The causal pathway linking the key elements to health impacts in the HIA



Findings of the HIA on health impacts

The HIA pointed to health impacts for the pathways in each of the areas assessed. It found health impacts across all three elements, with the most significant noted in the summary tables below.

On **improving the performance of health services and ensuring the continuity of quality care at all levels of the health care system**

Legend : Direction of impact ⊕ = positive and ⊖ = negative / 🟢 = Low, 🟠 =Medium, 🔴 =High

SDH	Health impact	Direc-tion	Magni-tude	Seve-rity	Likeli-hood	Overall significance
Resource availability & distribution	Resource improvement (HR, minimal package etc.) +ve but lack of ASM trust & self-medication	⊕/⊖	🟠	🟢	🔴	🟠
Geographic accessibility	Distance, time access standards +ve but ASM isolated & women vulnerable	⊕/⊖	🟠	🟢	🟠	🟢
NCD manage -ment	Occupational disease, mental ill health and chemical exposures	⊖	🟠	🔴	🟠	🔴

Many areas lacked basic health facilities around Kolwezi, despite some observed improvement. A third (32%) of women reported taking more than 60 minutes to reach a health facility, and more than 96% do not use motorized transportation (3). ASM miners and communities are noted to have prevalent non communicable diseases, including occupational diseases linked to chemical pollutants, pulmonary diseases such as silicosis, and tuberculosis coexisting with mine-related diseases (4,5). The exclusion of these NCDs from the minimum health service package for all health facilities weakens their management in ASM.


Pregnant woman in ASM area carried on a handmade stretcher to health care, Maniema, DRC. Source: Master X. 2026

In relation to **strengthening the "Health in All Policies" approach to reduce the burden of disease and ensure the sustainability of the universal health coverage** road conditions present a major barrier for timely geographic access to care, particularly given the isolation of ASM sites and their links to health facilities through inadequate roads (see adjacent photograph). Traffic congestion is a permanent concern, exacerbated by heavy trucks transporting ore causing accidents and injury. ASM miners, especially pregnant women, reported being afraid of dying on the way to health facilities due to riad accidents. Under nutrition and malnutrition are present in ASM miners and communities, especially women and children (5). The food supply chains for many ASM sites and surrounding communities are highly dependent on distant towns driving food costs to three to five times more than in towns (6).


Impassable dirt road during rains. Source: P Dunia, 2023

Thirdly, in relation to **extending financial protection for all,** while the UHCP plan aims to establish national and local coordination and collaboration for health insurance, only 1% of congolese people have a social insurance (5) and only 4% of people of working age (3). Household health expenditure is high and out-of-pocket payments substantial. Despite legal provision for informal sector health insurance, uptake is very low and most rely on informal social protection (2). While there is a "national health insurance for the informal sector" in the legislation,

Overall, governance reforms implemented in the provinces are top down, and rely heavily on the central level (2). They do not involve the local community in decision-making processes, excluding miners' organizations from local governance (4).

Recommendations from the HIA

Based on the findings, actions are recommended to mitigate the most significant health impacts and to close the evidence gaps.

On the UHCP design:

a. **Include common NCDs including mine-related diseases in ASM sites** in the UHCP design, free NCD screening in ASM sites, accompanied by awareness-raising on these NCDs by the local ministry of Health and Welfare, miner's and local community organisations.

b. Identify HiAP interventions based on different needs in different sites **through coordinated cross sector actions** between health, relevant sectors, ASM co-operatives and community representatives.


Degraded hill by ASM activities in North Kivu (DR Congo) Source: Philipe Dunia, 2023

c. **Expand options for local food production in ASM communities**, through various farming and food processing options, including with young people.

d. Include miner organisations in the ASM community to **integrate options for health insurance for ASM communities,** such as mutual health schemes for ASM, reducing the administrative costs associated with accreditation and the tax burden borne by these associations.

On the UHCP implementation:

a. **Expand the minimum service package** (staffing, infrastructure) across all health centers in ASM areas, supported by the Ministry of public health and large-scale mines.

b. **Raise awareness among artisanal miners and medicine vendors** on the harms of self-medication and of procuring medicines from informal channels, working with ASM co-operatives and non-government organisations and local Ministry of Health to intensify regular monitoring, inspection and training of pharmacies.

c. **Reduce the cost of healthcare** for ASM communities through offset grants to healthcare facilities, and partnerships with mutual health organisations.

d. I**mprove transport to services** through dedicated roads for the movement of heavy lorries and machinery transporting ore, keeping roads for populations and ambulances usable. This deserves urgent attention as it can affect achievements from other actions.

Across all these areas the HIA raises recommendations to integrate HIA with environmental impact assessment. HIA can be systematically linked and implemented concurrently with Environmental and Social Impact Assessment (ESIA) in mining areas, even while each has their own legal basis, one in environmental law and the other in public health law.

The impacts interact, and call for synergistic and coordinated actions in the implementation of UHCP in ASM ensure that links are made, and to integrate all sectors and organisations that play a role in planning and implementation of such co-ordinated action.

It is recommended that a joint HIA-ESIA monitoring framework and mechanisms be established at provincial and local levels involving mining companies, health authorities, environmental agencies, municipalities, health zones, ASM and community representatives to monitor health risks, identify priority exposures and plan services. For the UHCP extending healthcare services without simultaneously reducing exposure to the polluted water, dust, contaminated environments, unsafe food systems and degraded living conditions in ASM would address the ill health consequences but not sufficiently prevent them by addressing their causes.

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