

GHANA

Accra



Intervention area: Air pollution/road safety

City focus: Coordinated efforts to improve road safety and air quality

The most promising, workable and cost-effective health interventions are those that simultaneously address the multiple health risk factors that often converge in cities. This has been demonstrated in Accra, Ghana, where – in accordance with the mandate of the Accra Metropolitan Assembly “to see all residents thrive” – several agencies have come together to implement cross-cutting transport- and air pollution-related health interventions. This case study looks at how they were implemented and evaluated, and how they have worked individually and collectively. It is based on 14 stakeholder interviews conducted in Accra in July and August 2018 during the Urban Health Initiative (UHI) Workshop on Data Analysis and Scenarios, and the launch of the BreatheLife Accra campaign.

Transport interventions in particular highlight the need to work across various sectors and agencies to improve public health. The Accra Speed Reduction Strategy – part of the Bloomberg-supported Partnership for Healthy Cities launched in February 2015 – and the Pedestrian Safety Action Plan launched in December 2017, aim to build on efforts to prevent injuries from accidents and improve overall citizen health. Accra developed interventions in four areas: speeding; seat-belt wearing; helmet wearing; and drinking and driving. Due to a unique regulatory framework, many road safety interventions in Accra must be implemented in partnership with the national government, as responsibilities are split between the city and national agencies for roads, signage and other related infrastructure. In addition, the Mayor and the political leadership of the city are appointed by the President of Ghana, which helps alignment of national and city politics.

Transport-related interventions were selected to build on past activities of the Bloomberg Initiative for Global Road Safety. Anecdotally, progress has been mixed. Strategies to deter drinking and driving and to promote helmet wearing have worked, but speed-reduction policies have been more difficult to apply and enforce.

In July 2018, Accra released its first ever *Road Safety Report*, outlining traffic safety data, the impacts of various interventions, and recommendations for further improvement. Data show that while Accra's population is growing quickly, the increase car ownership has outpaced it. From 1991 to 2011, the estimated national population grew by 69.3% while the estimated number of registered vehicles increased by 828.2%¹, with the Greater Accra Region accounting for over 60% of all registered vehicles in Ghana. Pedestrians accounted for over 70% of road users who died because of a road crash (2011–2015), and the N1 highway, a target area for intervention, accounts for over 60% of all accidents on major highways in the city.²

Local authorities in Accra are now using data from the *Road Safety Report* to implement traffic calming strategies in Lapaz, one of the most dangerous junctions on the N1 highway. Based on problems highlighted by the data, signage and traffic lanes have been updated, a pedestrian walkway has been built, and a pedestrian crossing has been altered to allow users more time to cross, alongside other actions to reduce fatalities and injuries.³ These kinds of traffic-calming strategies have been used successfully in other parts of the city, with international partners contributing to build infrastructure in particularly high-risk areas. However, there is still a need to improve driver awareness in Accra, as otherwise improvements in road infrastructure, such as better road surfaces, could have a counter-effect of increasing driving speed.

At the same time, there has been substantial work on air pollution. Accra's UHI has focused on showing that multiple benefits for public health can be achieved from short-lived climate pollutant (SLCP) reduction in cities. The initiative mobilizes and empowers the health sector to support policies and investments in issues typically considered outside a health remit: healthy and cleaner transport; clean household energy and appliances; and better municipal waste management. The city has also employed several activities for stakeholder engagement across these different sectors. The initiative has worked with various agencies, stakeholders and sectors to map existing policies; build competencies of health policy-makers to assess the health and economic impacts of policies; adapt analytical tools and collect relevant data; estimate the impacts of policy interventions; communicate the cost of inaction; and implement policies to curb air pollution and improve health.⁴ Partners come from many relevant local and national institutions, including Accra Metropolitan Assembly (AMA), Ghana Health Service, Ministry of Transport, National Development Planning Commission, the Energy Commission, Ghana Environmental Protection Agency, and local universities, among others.

A UHI Transport Working Group was formed and a series of scenarios modelled to assess the impact of alternative transport policies. This exercise suggested that increasing active transport (walking and cycling) and shifts from car to bus use are likely to have large health benefits by increasing physical activity and reducing road injuries, in addition to health gains from reductions

in air pollution emissions. In contrast, a scenario with increased motorcycle use led to increased deaths and disability from road injuries. Estimates found 5500 averted deaths from reduced air pollution, and an additional 33 000 averted deaths from increased physical activity in the most aggressive policy scenario over the next 35 years. This policy scenario included increasing public transport, fleet fuel economy, and infrastructure for walking and cycling, while reducing reliance on cars, resulting in an economic health benefit worth almost US\$ 14 million.⁵

Data generated by the UHI and the unique political structure of the AMA have unlocked opportunities to win a wide range of health benefits. The AMA has incorporated the findings of UHI into its Climate Resilience Strategy and plans to use these results and enhanced health competencies in the ongoing development of its Climate Change Action Plan. In addition to air quality improvements, these strategies will include broader system changes affecting shifts in modes of transport used. Joint training provided to health, transport, environment and energy practitioners proved to be a successful strategy to break down the barriers between sectors and strengthen debate and collaboration across sectors. The growing understanding and recognition of the health impacts of transport policies also led the Department of Transport of the AMA and the Ghana Ministry of Transport to consider incorporating transport and health analytics into their regulatory frameworks for the transport sector. These tools have been adapted for the local context with help from local and international experts.

Accra's experiences with these projects point to the importance of supporting system-based investments and changes in the transport system to ensure individual programmes can maximize impact. Without system-wide interventions, the health benefits of improvements in road safety will be undermined by the impact of soaring traffic congestion on air quality and the problems created when walking, cycling and public transport systems cannot meet an increasing demand for mobility.⁶

This work has also shown that data availability and quality are critical issues in planning health interventions. Enforcement and maintenance costs can only be accurately calculated with upfront costs of interventions when various stakeholders have been consulted. Fundamental to these essential practices when planning, implementing and assessing health interventions are data. To this end, Accra is investing in a data centre and a small team to run it. By making Accra a smarter city they hope to create policies that are “bankable”, producing health and economic benefits as part of Accra's ambitious strategy to become the cleanest city in Africa.

Finally, learning and feedback – essential for good cross-policy interventions – is stimulated when all stakeholders regularly communicate with each other. This process has been well facilitated by the political leadership of the Accra Metropolitan Assembly and the consolidation of structures to enable and foster collaboration, including staff to inform and coordinate the sustainability agenda of Accra – from tackling air pollution and climate change, to addressing road safety issues, and protecting and promoting the health and well-being of all city dwellers.

-
- ¹ Hesse CA, John Ofusu J. Comparative analysis of regional distribution of the rate of road traffic casualties in Ghana. Open Science Repository Mathematics. 2014. 10.7392/openaccess.45011802#sthash.vppolvJt.dpuf.
- ² Metropolitan Assembly Road Safety Report 2011–2015. Accra: Accra Metropolitan Assembly and Bloomberg Philanthropies Initiative for Global Road Safety. 2018.
- ³ Preliminary Resilience Assessment. Accra: Accra Metropolitan Assembly. 2018.
- ⁴ WHO Urban Health Initiative: Evidence based strategies to reduce the burden of air pollution in Accra, Ghana. Geneva: World Health Organization; 2018.
- ⁶ Integrated Sustainable Transport Carbon-Health-Economic Assessment Tool (iSThAT). Geneva: World Health Organization; 2019 (<https://www.who.int/sustainable-development/urban/guidance-tools/en/>, accessed 16 September 2019).
- ⁷ Health in the green economy. Geneva: World Health Organization; 2011.