2025

Sophie Sherer

Closing the Gap: Health Equity in Burkina Faso

Source: Centre d'étude et de coopération (CECI) (2024)

Executive Summary

Burkina Faso, a United Nations member state, faces significant barriers to achieving Universal Health Coverage (UHC) by 2030. UHC currently stands at 40% and is stagnating (improving less than 50% of its required rate) to meet the country's Sustainable Development Goals (SDG) (Sachs, Lafortune & Fuller, 2024). With a SDG index score of 53/100, Burkina Faso must make significant strides to improve healthcare access and outcomes (Sachs et al., 2024).

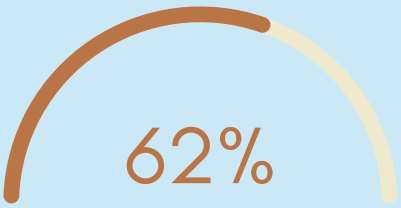
Recent declines in life expectancy and underinvestment in healthcare reflect broader economic instability and limited access to essential services. Rural populations, comprising 67% of the country, remain underserved, exacerbating health disparities. Maternal and child health (MCH) remains a critical concern, with high maternal and under-five mortality rates. Communicable diseases, particularly malaria, respiratory infections, and diarrhoea, continue to drive preventable deaths, largely due to inadequate water, sanitation, and hygiene (WaSH) conditions.

To address these challenges, Burkina Faso should prioritise enhancing emergency transportation initiatives for pregnant women and targeted WaSH infrastructure improvements in rural areas.

Background

Source: CECI (2024)

Burkina Faso has committed to striving towards UHC by 2030, yet significant challenges threaten to stall progress (World Health Organisation [WHO], 2025). In 2021, the country experienced its first **decline** in average life expectancy at birth, from 62.6 to **62.3 years** (WHO, 2024). This places the country 1.3 years below the African average (WHO, 2024), reflecting not only broader healthcare challenges but also the country's economic instability, exacerbated by ongoing internal conflicts and limited access to essential services. Despite efforts to increase health financing, the domestic government health expenditure has decreased by **1.8%** between 2020 and 2021, dropping to **9.8%** (WHO, 2024). This underinvestment is reflected in the country's shortage of medical doctors, which stood at just **1.47** per 10,000 people in 2022 (WHO, 2024). Since 2012, the density of doctors has only increased a mere **1.01%**, an improvement that fails to meet the demands of a population growing **2.3%** per year. As a result, Burkina Faso continues to fall behind the African average of 2.4 doctors per 10,000 people, highlighting the need for greater investment in the health sector (WHO, 2024).



The population of Burkina Faso is forecast to grow from 23M to 37.3M by 2050, an increase of 62% from 2023

WHO (2024)

Health resource allocation has largely favoured urban centres, leaving **67%** of the population, who reside in rural areas, underserved (Zon, Pavlova & Groot, 2020; World Bank Group [WBG], 2023). This underfunding has led to health access barriers for the majority, with a lack of health infrastructure, skilled healthcare providers and poor WaSH conditions in rural areas (Mwase et al., 2018; UNICEF, 2018; Zon et al., 2020; WaterAid, 2023). In 2021, access to drinking water and sanitation in rural areas was **69.5%** and **21%** respectively, compared to **92.2%** and **40.4%** in urban areas (African Development Bank Group [ADBG], 2022). As a result, the health gap between rural and urban populations continues to widen, undermining national progress towards UHC and good health and well-being for all.

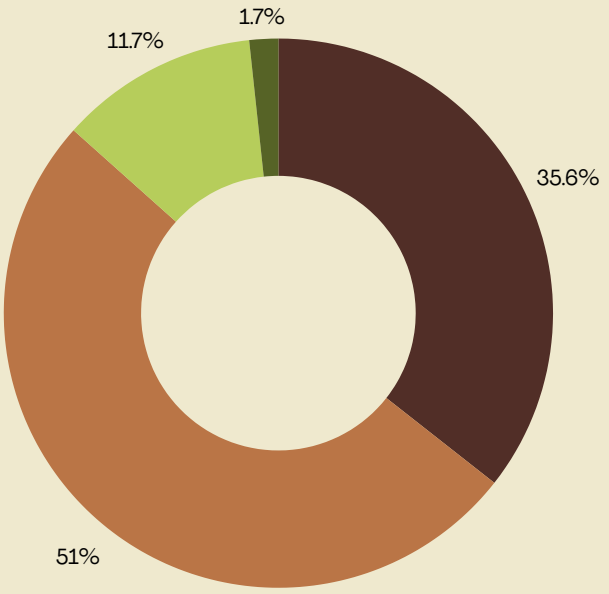
MCH remains a critical area of concern. The maternal mortality rate (death during pregnancy or following abortion) stands at **263.8 deaths** per 100,000 live births, categorising Burkina Faso as having a moderate to high maternal mortality rate (WHO, 2023a; WHO, 2024). Deaths for under-five year olds is 79 per 1,000, which is higher than the Sub-Saharan African average of 71 (WBG, 2022; WHO, 2024). In rural areas, the infant mortality rate has been previously reported at 35 per 1,000 compared to 30 per 1,000 in urban areas and 25 per 1,000 among the wealthiest households, highlighting the health gap (UNICEF, 2018).

Source: Wikivoyage (2020)

Limited access to essential medicines (available in only **29%** of facilities between 2015-2018) further exacerbates MCH risks (WHO, 2023a). Additionally, women in rural areas are around **34%** less likely to deliver in a healthcare facility or receive skilled care during childbirth, and antenatal care coverage remains critically low at **31%**, leaving mothers and new-borns vulnerable to complications and poor outcomes (UNICEF, 2018).

Deaths by Broad Cause

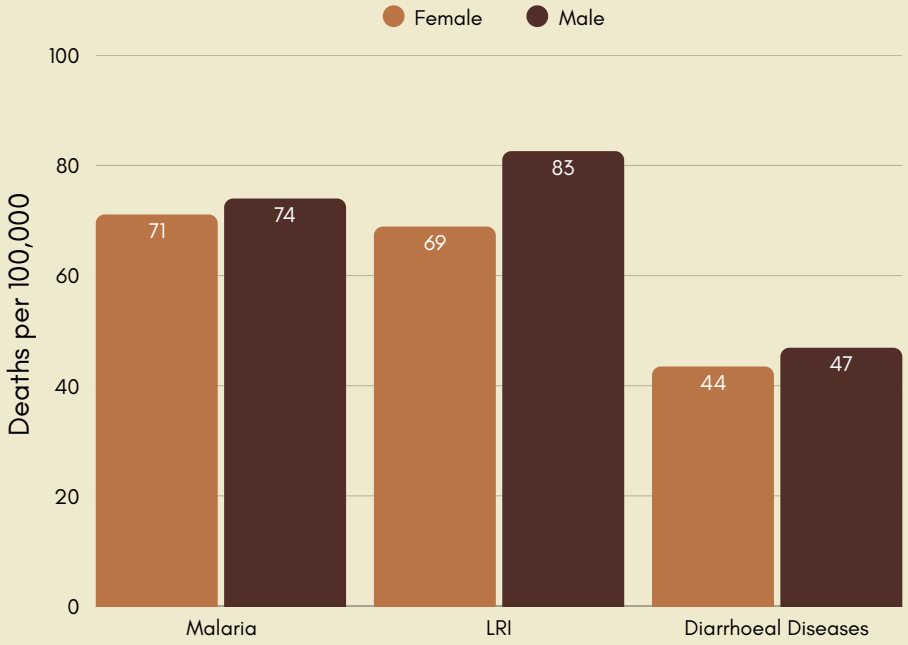
WHO (2024)



MCH challenges are not isolated but form part of a broader pattern of preventable death. Communicable diseases (those that can pass between individuals), maternal, perinatal (the period prior, during and following birth), and nutritional conditions account for **51%** of all deaths in Burkina Faso.

Leading Causes of Death in Burkina Faso

WHO (2024)



Source: Yellow Crest Media (2014)

Open and stagnant water sources create ideal breeding conditions for mosquitoes, increasing the risk of malaria (Prüss-Ustün et al., 2019)

Malaria, lower respiratory infections (LRI), and diarrhoeal diseases remain the three leading causes of death in Burkina Faso, with unsafe WaSH conditions playing a crucial role in their spread (WHO, 2024). In 2016, across low- and middle-income countries (LMIC), an estimated **80%** of malaria cases were attributed to inadequate water resource management (Prüss-Ustün et al., 2019), making malaria one of the most WaSH-sensitive diseases. Despite this, limited infrastructural improvements over the past decade have sustained Burkina Faso's high burden of disease. In 2022, the country accounted for **3.2%** of malaria cases globally, while only making up 0.29% of the world's population (WHO, 2023b). Across LMICs inadequate WaSH also contributed to **60%** of all diarrhoeal deaths, **16%** of malnutrition cases and **13%** of respiratory infections (Prüss-Ustün et al., 2019). In Burkina Faso, this results in 61 deaths per 100,000 people, making Burkina Faso the **11th** worst-affected country globally (WHO, 2024). Given the specific health challenges in the country, targeted WaSH policies, particularly in underserved areas, is of critical importance.

By tackling rural health inequities in maternal and child health and improving WaSH infrastructure, Burkina Faso can make significant progress towards achieving its UHC and SDG commitments. This policy brief will outline evidence-based policy recommendations to realise these goals.

Priority SDGs

This policy brief targets four of the UN's SDGs:

03. Good Health and Well-Being

This brief directly addresses the improvement of health outcomes by targeting maternal and child health and reducing the transmission of communicable diseases.

05. Gender Equality

With an emphasis on rural women and children, these policy recommendations seek to improve gender inequalities in health outcomes.

06. Clean Water and Sanitation

The proposed strategies to strengthen WaSH infrastructure focuses on ensuring access to clean water and sanitation for all.

10. Reduced Inequalities

Addressing health disparities between the rural and urban populations is a key focus of this brief's recommendations.

Improving Maternal and Child Health in Burkina Faso

Source: Sanitation and Water for All (SWA) (n.d.)

Current Efforts

In 2016, Burkina Faso implemented the Gratuité scheme, which provided free access to healthcare across the public sector for pregnant women, mothers and their children <5 (Boxshall et al., 2020). The scheme was expanded in 2020 to exempt women of reproductive age (15-49) from user fees for family planning services, including costs related to abortion (Boxshall et al., 2020). The primary goal of this initiative was to improve access and healthcare utilisation in this vulnerable group by removing financial barriers to care (Boxshall et al., 2020).

An evaluation of Gratuité in the two years following its implementation showed a **57%** increase in health facility visits for children <5 in the month following the programme's launch, with a **2.5%** increase in utilisation compared to before implementation (Debe et al., 2022). The scheme has also contributed to an increase in the number of rural women traveling **>5km** to attend antenatal care (ANC) visits, though no significant increase in the number of facility births was observed (Offosse et al., 2024).

Despite the improvements in ANC coverage, rural women remain more likely to access primary healthcare services over hospitals or more specialised care due to disparities in the distribution and availability of healthcare facilities (Zon et al., 2021). While increasing primary care access is an important achievement for overall health outcomes, further efforts are needed to address the discrepancies in service utilisation, especially when more complex health needs go beyond the scope of primary healthcare.

Source: Humanium (2021)

Ongoing Issues

More than six years after the scheme's implementation, maternal and child mortality remains a serious concern. The death due to complications from premature birth is still the **5th** leading cause of death, accounting for 35.2 deaths per 100,000 live births, and birth trauma and asphyxia (lack of oxygen) remain the **9th** leading cause at 21.7 deaths per 100,000 live births (WHO, 2024).

Geleto et al. (2018) conducted a systematic review of 37 studies investigating barriers to accessing and utilising emergency obstetric care in sub-Saharan Africa, finding that rural residence, poor transportation infrastructure (e.g., lack of vehicles and inadequate roads) and transportation costs limit emergency care utilisation. In Burkina Faso itself, household wealth and distances >5km from a health facility are associated with reduced access to healthcare facilities, highlighting persistent inequities in healthcare utilisation (Mwase et al., 2018).

A **systematic review** is a comprehensive synthesis of **all** the relevant research on a specific topic, making it the highest form of evidence.

Policy Solutions: Transport

The **Three Delays Model** of maternal mortality, introduced by Thaddeus and Maine (1994), provides a framework for conceptualising the three critical time points that contribute to maternal deaths. As financial constraints, large distances and transportation issues (such as lack of services and vehicles) are the most recurring barriers that prevent pregnant women from obtaining timely healthcare (Lee et al., 2009; Alaofe et al., 2020). As such, this brief will specifically focus on addressing **delay two** - the delay in reaching a health facility.

The Three Delays Model

Thaddeus and Maine (1994)

A number of LMICs in Africa and Asia have implemented various transportation initiatives to support pregnant women in receiving timely healthcare. Alaofe et al.'s 2020 systematic review of nine studies that assessed emergency obstetric transportation showed they have the potential to reduce adverse health outcomes and increase **facility deliveries** by **12-50%**. Where programmes incorporated enhanced communication systems (e.g., two-way radios or mobile phones) with ambulance transport, increased health facility referrals and reduced **maternal deaths** by up to **50%** were observed (Lee et al., 2009; Alaofe et al., 2020). Other initiaives, such as *the Balochistan Safe Motherhood Initiative* in Pakistan, combining birth attendant training with wireless phone technologies for ambulance transport, also significantly **reduced infant mortality** (from 85.2 per 1,000 to 49.4 per 1,000) (Lee et al., 2009). Across four contexts, engaging communities to take action themselves e.g., by arranging local transportation options and funding, consistently increased institutional deliveries by **71%** and reduced perinatal mortality by **25%** (Lee et al., 2009).

Integrating technology and local transportation solutions was achieved by the *m-mama* initiative in Tanzania and Lesotho. *M-mama* provides free emergency transport to rural pregnant women through a toll-free call system, using ambulances and local "taxi ambulances" (Vodafone, 2024). *M-mama* has proven to be **cost-effective**, saving approximately **$305USD** per completed transport compared to traditional ambulance services (Munishi et al., 2022).

Source: Vodafone Foundation (2016)

To reduce delays in care and improve MCH outcomes, Burkina Faso should adopt a multi-faceted approach, integrating transportation and communication technology in rural areas. This includes establishing ambulance services linked to mobile mobile phone networks, with the feasibility of toll-free emergency numbers explored for ambulance dispatch. Equally important is empowering local communities to manage transportation. This can be achieved through community-managed emergency transport funds, village committees to help coordinate local transport systems and ensure driver availability for 24/7 service.

Strengthening Water, Sanitation and Hygiene Infrastructure in Burkina Faso

Source: SWA (n.d.)

Current Efforts

Burkina Faso has undertaken several initiatives to improve WaSH conditions, with a focus on increasing access to sanitation facilities (e.g., latrines) and drinking water services (DWS). In 2014, the National Community-led Total Sanitation (CLTS) strategy was launched by directly engaging communities to participate in the construction of sanitation facilities to end open defecation (defecating outdoors rather than using a toilet) (UNICEF, 2024). However, after five years only 14.2% of targeted villages were certified as open-defecation free (UNICEF, 2024).

More recently the National Water Strategy (2021-2025) was launched, aiming to construct new, and rehabilitate existing, DWSs, alongside the construction of 10,000 household latrines for vulnerable households (ADBG, 2022). Similarly, the Rural Drinking Water and Sanitation Project (PEPA-MR), concluding in 2024, sought to prioritise the construction of DWSs and sanitation blocks in rural areas (ADBG, 2022).

Ongoing Issues

Despite these efforts, the 2024 Sustainable Development Report indicates that Burkina Faso's progress towards meeting its WaSH targets is stagnating and in some instances even declining. Access to basic DWS declined from 57.5% in 2000 to **49.5%** in 2022, reflecting inadequate infrastructure expansion while demand continues to grow (Sachs et al., 2024). Meanwhile, only **7.8%** of available freshwater resources are being utilised (below the 12.5% target), suggesting underutilisation and inefficiencies in water resource management (Sachs et al., 2024). Access to basic sanitation services has also stagnated, with only **25%** of the population being covered in 2022, well below the country's universal coverage goal (Sachs et al., 2024).

Source: SWA (n.d.)

25%
of the population is using a basic sanitation service

49.5%
of the population is using a basic drinking water service

Climate change, causing erratic rainfall, periods of drought and subsequent water scarcity also hinders progress in addressing the country's WaSH challenges (ADBG, 2022). This highlights the need for resilient WaSH policies that can adapt to the continued effects of climate change and ensure sustainable access to clean water and sanitation for vulnerable populations.

Policy Solutions: Water

Water storage and treatment are essential for safe consumption and improved health outcomes. Wolf et al. (2018) reviewed 135 studies from LMICs, finding that combining safe water storage (e.g., lidded containers with taps or narrow openings) with **point-of-use (POU) water treatment** (e.g., filtration at the faucet) reduced **diarrhoea risk** in children by **48%**, compared to **36%** with POU treatment alone. No single POU filtration method appeared to be more superior, allowing for context-specific approaches (Wolf et al., 2018). Similarly to Clasen et al. (2015) in their review of 54 studies evaluating both child and adult diarrhoea in LMIC settings, safe water storage reduced the risk of diarrhoea by **62%**, whereas POU filtration alone reduced it by **40%** (Clasen et al., 2015).

Beyond diarrhoea, water management may influence **malaria risk**. Shayo et al. (2021) found child malaria infections were significantly lower in Tanzanian households with piped versus non-piped water supplies (**7.3% vs. 59.6%**), even after accounting for sociodemographic and regional factors. However, expanding piped water infrastructure may not always be a viable solution, especially in rural areas of Burkina Faso where infrastructure and maintenance resources are limited. Intermittent water supplies, backflows and leaks can lead to contamination and increase the risk of waterborne diseases (Wolf et al., 2022).

Source: SWA (n.d.)

Ercumen et al. (2015) observed groups of children, differing only in their access to continuous or intermittent piped water, and assessed their health outcomes. They found that **continuous piped water** provided greater benefits in poorer areas, where contamination risks are higher. However, no such benefit was observed in more advantaged areas, suggesting that prioritising continuous piped water may be less impactful in these settings.

POU water treatment reduces diarrhoea risk by improving water quality at the consumption point

Given these findings, supplying households with safe water storage containers combined with POU water treatment is an effective and most feasible strategy in reducing waterborne disease spread. In rural areas, public water supplies should prioritise continuous piped water with POU treatment to maximise health benefits.

Policy Solutions: Sanitation

Sanitation interventions play a crucial role in reducing the spread of diarrhoeal disease. Wolf et al. (2014; 2018) found that basic household sanitation only reduces **diarrhoea risk** by **16%,** whereas improved sanitation with **sewer connections** lowers it by **40%**. When community-wide sanitation coverage exceeds **75%** however, diarrhoea risk drops by **45%**, emphasising the need of achieving high coverage across all regions of Burkina Faso.

Source: We Are Water Foundation (2021)

However, sustaining latrine use and achieving large-scale coverage remains a challenge. A review of 27 studies examining various sanitation interventions, including CLTS, subsidies, and education initiatives, found that these approaches led to only a modest **14%** increase in latrine coverage (Garn et al., 2016).

A systematic review by Venkataramanan et al. (2018) found **little evidence** to support CLTS leading to long-term sanitation behaviour change. In Ghana, CLTS combined with additional behaviour-change techniques was not superior to standard CLTS alone (Harter, Inauen & Mosler, 2020). This suggests that other barriers, such as affordability and access to materials, may be limiting factors. This would be particularly relevant in rural areas, where CLTS, as a no-subsidy approach, may be less effective. Without access to affordable building materials or technical support, poorer households may struggle to construct and maintain latrines, reducing the overall impact of the intervention. This challenge was evident in the CLTS programme previously implemented in Burkina Faso, where limited efficacy was observed in rural and resource-constrained areas (UNICEF, 2024).

Alongside the efforts by the National Water Strategy and PEPA-MR to increase latrine coverage, existing and future initiatives should support the construction of sewer-compatible latrines to enhance durability and facilitate future sewer connectivity. Given the importance of community-wide sanitation coverage in reducing diarrhoea risk, ensuring latrines are designed with future sewer connections in mind will provide long-term health benefits and support the overarching goals of improving sanitation access. To ensure sustainability, a phased sanitation infrastructure plan should be developed, prioritising rural areas for gradual sewer expansion. This approach will help distribute costs over time while ensuring that investments in sanitation infrastructure align with future urbanisation and development goals. In addition, targeted subsidies should be considered to address affordability challenges in rural areas, ensuring that lower-income households can participate in this transition towards more durable and future-proof sanitation systems.

Policy Solutions: Hygiene

Hand hygiene interventions play an important role in reducing the burden of infectious diseases, including diarrhoea and respiratory infections. A systematic review by Mbakaya, Lee and Lee (2017) found that school-based interventions (for ages 6-12) in LMICs, reduced **diarrhoea by 53%-73%** and **respiratory infections** by **23%**. The interventions included education/trainings, as well as the provision of hand hygiene products (e.g., soap or sanitiser) to ensure access and proper use. These findings align with broader evidence suggesting that improved hand hygiene is essential for preventing the spread of diarrhoeal and respiratory pathogens (Chirgwin et al., 2021; Wolf et al., 2022).

Source: SWA (n.d.)

Pickering et al. (2013) evaluated the impact of hand sanitiser in Kenyan schools. Compared to schools without access to hand sanitiser, children in the targeted schools were twice as likely to practice good hand hygiene after using the toilet (Pickering et al., 2013). Students also experienced less cold symptoms and missed fewer days from school due to diarrhoea and respiratory infections Pickering et al., 2013). In areas where water access is unreliable the provision of hand sanitiser is therefore a viable alternative. Handwashing with soap remains the cornerstone of WaSH programmes and has a broader evidence base, most of which suggest that combined WaSH interventions, that address multiple infection pathways, are most efficacious (Chirgwin et al., 2021; Wolf et al., 2022).

Local weather and **climate change** affects the effectiveness of WaSH interventions. A systematic review by Hubbard et al. (2025) found that water and hygiene interventions were **15% less effective** at reducing diarrhoeal conditions during rainy seasons compared to dry seasons (Hubbard et al., 2025). This may be due to the lack of resilient infrastructure during weather events such as flooding.

The promotion of good hygiene practices should be integrated into the aforementioned water and sanitation strategies to maximise health outcomes. This includes the provision of hygiene supplies and education of when hand practices should be carried out. In areas with unreliable water and/or soap availability, the use of hand sanitiser should be considered. By embedding hygiene practices within existing WaSH programmes and ensuring that they are adaptable to local conditions, the impact of these interventions can be enhanced, contributing to improved public health outcomes and greater resilience to climate-related disruptions.

Limitations

The data available on Burkina Faso is limited, with most sources dating from 2022 or earlier, highlighting a lack of up-to-date information on current conditions in the country. Additionally, much if the intervention evidence stems from other LMICs, with few studies conducted in Burkina Faso itself, which may limit the generalisability of findings to the unique context of Burkina Faso.

Significant variation in study interventions makes it challenging to establish a strong, evidence-based foundation for specific policy recommendations. This inconsistency, combined with the presence of some low-quality studies, weakens the confidence in how effectively these policies would translate to Burkina Faso. It is therefore essential that proposed interventions are piloted, closely monitored and adapted to the local conditions to maximise their effectiveness.

Source: Humanium (2021)

References

African Development Bank Group (ADBG) (2022) 'Burkina Faso - Water and Sanitation Services Improvement Project for Resilience Building (PASEPA - 2R) - Project Appraisal Report', African Development Bank Group. African Development Bank Group. Available at: https://www.afdb.org/en/documents/burkina-faso-water-and-sanitation-services-improvement-project-resilience-building-pasepa-2r-project-appraisal-report (Accessed: 10 March 2025)

Alaofe, H. et al. (2020) 'Emergency Transportation Interventions for Reducing Adverse Pregnancy Outcomes in Low- and Middle-Income Countries: A Systematic Review', Annals of Global Health, 86(1), p. 147. Available at: https://doi.org/10.5334/aogh.2934.

Boxshall, M. et al. (2020) 'An overview of the user fee exemption policy (Gratuité) in Burkina Faso'. Washington, DC: Recherche pour la Santé et le Développement and ThinkWell.

Centre d'étude et de coopération internationale (CECI) (2024) 'Project to support institutional and technical reforms for equity (Parité)' Available at: https://ceci.org/en/projects/project-support-institutional-technical-reforms-equity-parite (Accessed: 06 March 2025).

Chirgwin, H. et al. (2021) 'Interventions promoting uptake of water, sanitation and hygiene (WASH) technologies in low- and middle-income countries: An evidence and gap map of effectiveness studies', Campbell Systematic Reviews, 17(4), p. e1194. Available at: https://doi.org/10.1002/cl2.1194.

Clasen, T.F. et al. (2015) 'Interventions to improve water quality for preventing diarrhoea', The Cochrane Database of Systematic Reviews, 2015(10), p. CD004794. Available at: https://doi.org/10.1002/14651858.CD004794.pub3.

Debe, S. et al. (2022) 'Effects of the free healthcare policy on health services' usage by children under 5 years in Burkina Faso: a controlled interrupted time-series analysis', BMJ Open, 12(11), p. e058077. Available at: https://doi.org/10.1136/bmjopen-2021-058077.

Ercumen, A. et al. (2015) 'Upgrading a piped water supply from intermittent to continuous delivery and association with waterborne illness: a matched cohort study in urban India', PLoS medicine, 12(10), p. e1001892. Available at: https://doi.org/10.1371/journal.pmed.1001892.

Geleto, A. et al. (2018) 'Barriers to access and utilization of emergency obstetric care at health facilities in sub-Saharan Africa: a systematic review of literature', Systematic Reviews, 7(1), p. 183. Available at: https://doi.org/10.1186/s13643-018-0842-2.

Garn, J.V. et al. (2017) 'The impact of sanitation interventions on latrine coverage and latrine use: A systematic review and meta-analysis', International Journal of Hygiene and Environmental Health, 220(2, Part B), pp. 329–340. Available at: https://doi.org/10.1016/j.ijheh.2016.10.001.

Harter, M., Inauen, J. and Mosler, H.-J. (2020) 'How does Community-Led Total Sanitation (CLTS) promote latrine construction, and can it be improved? A cluster-randomized controlled trial in Ghana', Social Science & Medicine, 245, p. 112705. Available at: https://doi.org/10.1016/j.socscimed.2019.112705.

Hubbard, S. et al. (2025) 'Differential Effectiveness of Water, Sanitation, and Handwashing Interventions to Reduce Child Diarrhea in Dry and Rainy Seasons: A Systematic Review and Meta-Analysis of Intervention Trials', Environmental Health Perspectives, 133(2), p. 026001. Available at: https://doi.org/10.1289/EHP14502.

Humanium (2021) 'Children of Burkina Faso'. Available at: https://www.humanium.org/en/burkina-faso/ (Accessed: 29 March 2025).

Lee, A.C. et al. (2009) 'Linking families and facilities for care at birth: What works to avert intrapartum-related deaths?', International Journal of Gynecology & Obstetrics, 107(Supplement), pp. S65–S88. Available at: https://doi.org/10.1016/j.ijgo.2009.07.012.

Mbakaya, B.C., Lee, P.H. and Lee, R.L.T. (2017) 'Hand Hygiene Intervention Strategies to Reduce Diarrhoea and Respiratory Infections among Schoolchildren in Developing Countries: A Systematic Review', International Journal of Environmental Research and Public Health, 14(4), p. 371. Available at: https://doi.org/10.3390/ijerph14040371.

Munishi, C. et al. (2023) 'Community-based transport system in Shinyanga, Tanzania: A local innovation averting delays to access health care for maternal emergencies', PLOS global public health, 3(8), p. e0001487. Available at: https://doi.org/10.1371/journal.pgph.0001487.

Mwase, T. et al. (2018) 'Inequities and their determinants in coverage of maternal health services in Burkina Faso', International Journal for Equity in Health, 17(1), p. 58. Available at: https://doi.org/10.1186/s12939-018-0770-8.

Offosse, M.-J. et al. (2024) 'Has the Gratuité policy reduced inequities in geographic access to antenatal care in Burkina Faso? Evidence from facility-based data from 2014 to 2022', Frontiers in Global Women's Health, 5. Available at: https://doi.org/10.3389/fgwh.2024.1345438.

Pickering, A.J. et al. (2013) 'Access to waterless hand sanitizer improves student hand hygiene behavior in primary schools in Nairobi, Kenya', The American Journal of Tropical Medicine and Hygiene, 89(3), pp. 411–418. Available at: https://doi.org/10.4269/ajtmh.13-0008.

Prüss-Ustün, A. et al. (2019) 'Burden of disease from inadequate water, sanitation and hygiene for selected adverse health outcomes: An updated analysis with a focus on low- and middle-income countries', International Journal of Hygiene and Environmental Health, 222(5), pp. 765–777. Available at: https://doi.org/10.1016/j.ijheh.2019.05.004.

Sanitation and Water for All (SWA) (no date). Available at: https://www.sanitationandwaterforall.org/about/about-us/water-sanitation-hygiene (Accessed: 08 March 2025).

Shayo, F.K. et al. (2021) 'Is the source of domestic water associated with the risk of malaria infection? Spatial variability and a mixed-effects multilevel analysis', International Journal of Infectious Diseases, 104, pp. 224–231. Available at: https://doi.org/10.1016/j.ijid.2020.12.062.

Sachs, J.D, Lafortune, G., and Fuller, G. (2024) 'The SDGs and the UN Summit of the Future. Sustainble Development Report 2024'. Paris: SDSN; Dublin: Dublin University Press. doi:10.25546/108572.

Thaddeus, S. and Maine, D. (1994) 'Too far to walk: maternal mortality in context', Social Science & Medicine (1982), 38(8), pp. 1091–1110. Available at: https://doi.org/10.1016/0277-9536(94)90226-7.

UNICEF (2018) 'Maternal and Newborn Health: Burkina Faso'. Available at: https://data.unicef.org/wp-content/uploads/cp/maternal-newborn-health/maternal-and-newborn-health_BFA.pdf (Accessed: 6 March 2025).

UNICEF (2024) 'Evaluation of Community-led Total Sanitation Implementation in Burkina Faso'. Available at: https://clearinghouse.unicef.org/sites/ch/files/ch/sites-PD-WASH-WASH%20Knowledge%20unicef-WASH%20Results624_Evaluation%20of%20CLTS%20Implementation%20in%20Burkina%20Faso-5.0.pdf (Accessed: 12 March 2025).

Venkataramanan, V. et al. (2018) 'Community-Led Total Sanitation: A Mixed-Methods Systematic Review of Evidence and Its Quality', Environmental Health Perspectives, 126(2), p. 026001. Available at: https://doi.org/10.1289/EHP1965.

Vodafone Foundation (2016) 'Vodafone Foundation – Maternal Health Programme'. Available at: https://www.flickr.com/photos/vodafonegroup/25133630899/in/album-72157665211190012 (Accessed: 29 March 2025).

Vodafone Foundation (2024) 'Lifesaving maternal transport system 'm-mama' to expand in Malawi and Tanzania'. Available at: https://www.vodafone.com/news/vodafone-foundation/lifesaving-maternal-transport-system-m-mama-to-expand-in-malawi-and-tanzania (Accessed: 23 March 2025).

Waddington, H.S. et al. (2023) 'Impact on childhood mortality of interventions to improve drinking water, sanitation, and hygiene (WASH) to households: Systematic review and meta-analysis', PLOS Medicine, 20(4), p. e1004215. Available at: https://doi.org/10.1371/journal.pmed.1004215.

WaterAid (2023) 'Burkina Faso Country Programme Strategy 2023-2028'. WaterAid. Available at: https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/2023-12/WaterAid%20Burkina%20Faso%20Country%20Strategy%202023-2028.pdf [Accessed 10 March 2025].

We Are Water Foundation (2021) 'The power of experience in Burkina Faso'. Available at: https://www.wearewater.org/br/insights/the-power-of-experience-in-burkina-faso/ [Accessed 26 March 2025].

Wikivoyage (2020) 'Burkina Faso', Wikivoyage. Available at: https://de.wikivoyage.org/wiki/Burkina_Faso (Accessed: 07 March 2025).

Wolf, J. et al. (2014) 'Systematic review: Assessing the impact of drinking water and sanitation on diarrhoeal disease in low- and middle-income settings: systematic review and meta-regression', Tropical Medicine & International Health, 19(8), pp. 928–942. Available at: https://doi.org/10.1111/tmi.12331.

Wolf, J. et al. (2018) 'Impact of drinking water, sanitation and handwashing with soap on childhood diarrhoeal disease: updated meta-analysis and meta-regression', Tropical Medicine & International Health, 23(5), pp. 508–525. Available at: https://doi.org/10.1111/tmi.13051.

Wolf, J. et al. (2022) 'Effectiveness of interventions to improve drinking water, sanitation, and handwashing with soap on risk of diarrhoeal disease in children in low-income and middle-income settings: a systematic review and meta-analysis', The Lancet, 400(10345), pp. 48–59. Available at: https://doi.org/10.1016/S0140-6736(22)00937-0.

World Bank Group (2022) 'Mortality rate, under-5 (per 1,000 live births), Sub-Saharan Africa'. Available at: https://data.worldbank.org/indicator/SH.DYN.MORT?locations=ZG&name_desc=false (Accessed: 5 March 2025).

World Bank Group (2023) 'Rural population (% of total population) – Burkina Faso'. World Bank. Available at: https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=BF&name_desc=false [Accessed 10 Mar. 2025].

World Health Organisation (WHO)(2023a) 'Maternal mortality: The urgency of a systemic and multisectoral approach in mitigating maternal deaths in Africa. Analytical fact sheet: March 2023' Available at: https://files.aho.afro.who.int/afahobckpcontainer/production/files/iAHO_Maternal_Mortality_Regional_Factsheet.pdf (Accessed: 10 March 2025).

WHO (2023b). 'World malaria report 2023'. World Health Organisation, Geneva. https://www.who.int/publications/i/item/9789240086173, accessed 10 March 2025.

WHO (2024) 'Burkina Faso country data'. Available at: https://data.who.int/countries/854 (Accessed: 5 March 2025).

WHO (2025): 'Universal Health Coverage, Regional Office for Africa'. Available at: https://www.afro.who.int/health-topics/universal-health-coverage (Accessed: 10 March 2025).

Yellow Crest Media (2014) 'Wasser ist Kostbar und in den Meisten Teilen der Welt Knapp', iStock. Available at: https://www.istockphoto.com/de/foto/wasser-probleme-gm491327313-39920882?searchscope=image%2Cfilm (Accessed: 10 March 2025).

Zon, H., Pavlova, M. and Groot, W. (2020) 'Regional health disparities in Burkina Faso during the period of health care decentralization. Results of a macro-level analysis', The International Journal of Health Planning and Management, 35(4), pp. 939–959. Available at: https://doi.org/10.1002/hpm.2979.

Zon, H., Pavlova, M. and Groot, W. (2021) 'Factors associated with access to healthcare in Burkina Faso: evidence from a national household survey', BMC Health Services Research, 21(1), p. 148. Available at: https://doi.org/10.1186/s12913-021-06145-5.