



Emmah Sesay at her home in Petifu Junction, Port Loko, Sierra Leone on 9th August 2021. Emmah is 20 years old and this is her second pregnancy. (PMI Impact Malaria / Flickr)

Drivers of Global Maternal Mortality

OVERVIEW

Each day, almost 800 women die from preventable causes related to pregnancy and childbirth. [A maternal death occurs every two minutes](#). Maternal mortality is defined as the death of a woman from complications of pregnancy or childbirth that occur during the pregnancy or within 6 weeks after the pregnancy ends.*

Maternal mortality remains a major global health crisis, despite global calls to attention. The staggering reality is that most maternal deaths are preventable and are caused by massive health inequalities which exist within and between countries on a global scale.

These inequalities are profound. Almost [95% of all maternal deaths occur in low- and middle-income countries](#)—with the greatest risk existing across Sub-Saharan Africa, which accounts for 70% of all maternal deaths. The current global rate of maternal deaths ([223 maternal deaths per 100,000 live births](#)) also remains far above the 2030 United Nations Sustainable Development Goal, which aims to reduce this figure to [less than 70 maternal deaths per 100,000 live births](#).

* Deaths due to complications of pregnancy or childbirth can occur beyond 6 weeks postpartum through 52 weeks or one year postpartum. Such deaths are classified as late maternal deaths.

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Nearly 75% of all maternal deaths stem from major complications which include severe bleeding (mostly bleeding after childbirth); infections (usually after childbirth); high blood pressure during pregnancy (pre-eclampsia and eclampsia); complications from delivery; and unsafe abortion. Pre-existing conditions such as chronic anemia, chronic hypertension, and diabetes are also a growing concern across the maternal health space. Suicide, overdose, and homicide are also leading causes of pregnancy-associated deaths up to one year postpartum, and these fatalities are often connected to intimate partner violence during pregnancy and the postpartum period. Finally, access to quality healthcare, social determinants of health, and gender inequality and norms, which vary widely by region, greatly impact maternal mortality rates.

Maternal mortality rates have shifted downward over the last few decades, largely due to increased access to contraceptives and family planning,

skilled birth attendants, and emergency obstetric care. Yet progress in reducing maternal deaths has stagnated in recent years. The COVID-19 pandemic, rising poverty rates, and worsening humanitarian crises have exacerbated the effects of already-decreasing investments in maternal health, and resulted in strained health systems and diminished attention to underlying determinants of maternal health.

In this policy brief, we examine the current state of maternal deaths around the world—as well as their key causes. We focus on global trends that create a negative impact on maternal health and mortality rates, including authoritarian leadership, conservative governments and policies; climate change; and conflict, displacement, and migration. Our brief concludes by offering recommendations to address underlying systemic causes and social determinants of maternal deaths, and what is necessary to lower global maternal mortality rates.



Nefisa, a 24-year-old farmer who lives in the Oromia Region and gave a healthy birth with the help of health extension workers and the Last Ten Kilometers project. (Adey Abebe, JSI Last Ten Kilometers project / Flickr)



LEADING CAUSES OF MATERNAL MORTALITY

Biomedical Causes of Maternal Deaths

Several types of pregnancy complications and underlying causes can contribute to increased maternal mortality incidence. Postpartum hemorrhaging remains one of [the top three obstetrics-related causes of maternal mortality \(98% of cases occur immediately post-delivery\)](#), along with infection and high blood pressure. Other causes of maternal death include complications from delivery. Most cases are found in low- and middle-income countries, with [more than 85% of deaths from postpartum hemorrhage occurring in Sub-Saharan Africa and South Asia](#).

Incidence of hypertension (high blood pressure) during pregnancy [has doubled from 2007 to 2021](#), yet there remains a large gap between diagnosis and treatment. Only about [60% of pregnant women with chronic hypertension receive medication to treat the condition](#). During pregnancy, the heart works harder to pump more blood throughout the body, increasing the likelihood of hypertension. While the number of deaths due to hypertensive disorders of pregnancy [decreased by 30% from 1990 to 2019](#), the number of new diagnoses of hypertensive disorders during pregnancy increased in the same period by almost 11% from [16.30 million to 18.08 million globally](#). Preeclampsia (a condition marked by high blood pressure, protein in urine, and swelling) and eclampsia (when a person with preeclampsia begins having seizures) are two other main causes of maternal mortality; preeclampsia [affects up to 8% of pregnancies worldwide](#), although [these numbers also vary widely by region](#).

Infection during pregnancy, also known as sepsis, [accounts for 11% of global maternal deaths](#). However, infections are underlying causes of many other contributors to maternal death as well, including postpartum hemorrhage. This suggests

that the true number of maternal deaths attributed to sepsis may be higher than indicated by current reports. Research also indicates that [current levels of monitoring and care across health care facilities are not sufficient to prevent, identify, and treat maternal infection](#) in a timely manner. Especially in low- and middle-income countries, the burden of sepsis is much higher than in high-income countries due to increased burdens on health care facilities, limited access to clean water and sanitation, and a scarcity of skilled birth attendants to monitor and treat infections.

[Unsafe abortion accounts for 10% of maternal deaths](#). Unsafe abortion is defined as occurring “when a pregnancy is terminated either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both.” Some [73 million induced abortions occur globally each year](#) and [45% of all abortions performed around the world are unsafe](#). These occurrences vary widely by region, even where abortion is largely legal, with [the majority of unsafe abortions occurring in South and Central Asia](#). Additionally, [3 in 4 abortions in Africa and Latin America are considered to be unsafe](#).

In countries where the procedure is legal, safe abortion care is still often inaccessible due to stigma, financial burdens, long waiting periods, providers’ conscientious objection, and significant travel to a health care facility. Complications from an unsafe abortion vary, but common health risks include hemorrhage, infection, uterine perforation, damage to internal organs and genital tract, and incomplete abortion.

Social Determinants of Maternal Health

While the biomedical contributors to maternal death are significant, focusing solely on interventions to address them ultimately ignores the most likely driver of stagnating maternal death rates. Social determinants of health—such as poverty, education level, and access to



healthcare—play a large, yet overlooked, role in the severity of maternal mortality causes and trends.

Women in low-income countries are at particular risk for maternal mortality. The lifetime risk of maternal death is a measure of the probability that a 15-year-old woman will eventually die from a maternal cause. It stands at **1 in 5300 in high-income countries, as opposed to 1 in 49 in low-income nations.**

On the individual and household level, research shows **that low family income and poverty are associated with higher maternal mortality** in low-income countries. In many cases, poverty is connected to maternal mortality due to its **association with malnutrition, which leads to cases of anemia** that contribute significantly to hemorrhage and infection.

Living in rural communities also **creates barriers to accessing obstetric health care.** Maternal

health outcomes around the world are **largely worse for women living in rural areas** due to weaker health care infrastructure and lack of investment to ensure that health care services reach these communities.

Racial disparities in maternal mortality also exist in a global context. **Afrodescendent women and girls are more likely to die during childbirth than almost every other racial and ethnic group in the Americas.** Structural racism (and sexism) can lead to systematic neglect in healthcare systems, as well as a greater occurrence of verbal and physical abuse in hospitals. And research has found that those who face **disrespect and abuse during childbirth**—whether at the level of interaction with the provider or with systematic failures at the health system level—can suffer from **negative maternal and newborn outcomes** and lower **maternal and neonatal postnatal care utilization.**



USAID worker communicating safely with communities in the midst of COVID-19. (USAID StopPalu+ / Flickr)



Additionally, women with disabilities have a higher risk of adverse maternal health outcomes. Many women face particular barriers to accessing care and lack need-specific services. They also have historically suffered from reproductive abuses, such as forced sterilization and forced abortions.

Adolescents face increased maternal mortality risks as well. Adolescent mothers have high rates of unsafe abortion—an estimated 3.9 million out of 5.6 million abortions that occur yearly for girls aged 15 to 19 are unsafe. Additionally, adolescent mothers also face higher risks of eclampsia, puerperal endometritis, and systemic infections, which could be attributed to uterine immaturity.

Low education for women can be a strong predictor of maternal death. Female literacy rates and enrollment in education programs are also associated with lower maternal mortality ratios. Improving education for women and girls also can delay marriage and childbearing, which can lead to better health outcomes for pregnant women. One demonstrated way to reduce early and unintended pregnancies in adolescents is to include comprehensive sexuality education in schools and community programs to address not only the biology of reproductive health, but also the importance of consent and bodily autonomy.

Ultimately, unequal gender norms across the globe also play a powerful role. Countries with high gender inequality are associated with higher maternal mortality rates compared to countries with low gender inequality. Gender-based violence is often a significant barrier for pregnant people accessing quality health services. Gender inequality also impacts investment in research and funding to reduce maternal deaths, further deprioritizing the lives of women when compared to children and men. Gender inequity also amplifies other social determinants of maternal health. Understanding the impacts of social determinants of health and intersectional issues is key to improving maternal health outcomes.

DRIVERS OF MATERNAL MORTALITY

There are several geopolitical drivers of maternal mortality rates. Humanitarian crises, including conflict, can impact maternal health care and outcomes. Factors including insufficient health care systems, poor quality of care, and shortages of health care workers and supplies also do so. Similarly, climate crises worsen many maternal health outcomes, while authoritarian governments pose particular challenges to maternal wellbeing. And, finally, restrictive policies related to access to accurate information and sexual and reproductive health care and services are a barrier to better maternal health outcomes and increase the risk of complications and maternal death.

Climate Change

A continuing climate crisis, which worsens each year, presents a massive public health threat, and long-term shifts in temperatures and weather patterns pose immense danger to maternal and newborn health outcomes. These impacts have been understudied and overlooked, and they have only begun to garner global attention in recent years. Numerous climate change patterns have had demonstrated impacts on maternal health and mortality, and as temperatures continue to rise (2023 was the warmest year on record), those consequences will continue to grow.

Extreme heat patterns can cause obstetric complications such as preterm births, stillbirths, gestational hypertension, and miscarriages, among other calamities. The increasing frequency of extreme weather and climate-related disasters similarly harm maternal health. Exposure to disasters like wildfires and hurricanes can increase the risk of pregnancy complications. And flooding has also drastically impacted maternal health, particularly as access to maternal, reproductive, and newborn healthcare tends to be excluded from emergency responses.





Mphatso Gumulira, 15, with her son Zayitwa in the Queen Elizabeth hospital in Blantyre, Malawi. (UK Department for International Development / Flickr)

Meanwhile, [indirect impacts from climate-related events similarly pose threats to maternal health](#). Changing air quality, access to food, prevalence of mosquito- and tick-borne diseases, and stress can all harm maternal wellbeing, and raise the rate of maternal mortality. Finally, a rise in climate-related migration has further compounded maternal health and mortality concerns.

Migration and Displacement

The mention of climate migration raises the question of the broader role that migration and displacement play in maternal death trends. Both [2023 and 2024 have seen historically high levels of forced displacement worldwide](#), with [281 million people displaced in regions around the world](#).

Migration and forced displacement pose immense burdens to maternal health and mortality. Migrants, asylum seekers, refugees, and immigrants often

lack access to perinatal health services due to heightened structural, organizational, social, personal, and cultural barriers. This can lead to [worse perinatal outcomes, including maternal mortality](#), maternal morbidities, maternal mental health, preterm birth, and congenital anomalies. Some research also has found that migrant women who were born outside of the host country, in comparison to women born in the host countries, can have [up to double the risk of maternal mortality](#).

Forced displacement raises [significant challenges to maternal health](#) particularly in refugee camps. The unavailability of clean water or sanitation, lack of shelter, inaccessibility to vocational training facilities, lack of culturally competent practices, challenges with healthcare infrastructure, and a shortage of skilled birth attendants all contribute to a rise in maternal deaths and disease in these contexts.



Conflict and Direct Attacks on Maternity Hospitals

Migration and displacement are particularly prevalent in conflict-affected areas. Research has found that [fragile and conflict-affected states contribute to more than 60% of the global burden of maternal mortality](#). In 2022, some [600 million women lived within 50 km of conflict](#), and there is evidence which shows that armed conflict increases the risk of maternal death. Many conflicts in recent years have seen these impacts play out broadly. Recent conflicts in Sudan, Gaza, and Ukraine have seen [attacks on maternity hospitals, increasing numbers of high risk pregnancies, and fractured access to sexual and reproductive health services](#).

Increases in maternal mortality in conflict also come about due to [political instability, destabilized health systems, negative socioeconomic conditions, decreased vaccination coverage, and delays in seeking care](#). Maternal survival is affected by [malnutrition, infectious diseases, poor mental health, and poor sexual and reproductive health](#)

as well. Lack of access to family planning services and contraceptives can lead to an increase in unintended pregnancies and unsafe abortions, and is often [inaccessible during humanitarian and fragile settings](#).

Authoritarian Regimes

Authoritarian regimes have become more prevalent in recent decades, with significant consequences for maternal health. Effective governance systems, independently of a country's wealth, are tied to better maternal health outcomes—[the greater the governance, the lower the rate of maternal mortality](#). Authoritarian governance can lead to [conservative policies that impact women's health and mortality](#), including decreased access to sexual and reproductive health care services (including abortion) and broader restrictions on reproductive autonomy.

Furthermore, [the rise of authoritarianism often is associated with restrictions on women's rights beyond their healthcare](#), as well as with a decrease in women's political participation and



Destruction of a maternity hospital after a direct hit by a ballistic missile during the war in Ukraine and Russia. (deniska_ua / Shutterstock)





Women Search and Rescue Teams practice evacuating an expecting mother in the Ganges delta. (EU Civil Protection and Humanitarian Aid / Flickr)

representation in government. This is particularly significant to any analysis of trends in maternal mortality, given that [gender quotas and an increase in women's political power can lead to better maternal health outcomes](#) due to increases in skilled birth attendance, more prenatal care, and an increase in schooling. However, [female representation in authoritarian contexts does not automatically translate to improved women's health outcomes](#).

US Foreign Policy and Influence

US foreign policy has demonstrated historical impacts on global maternal mortality rates. The [Mexico City Policy](#), often referred to as the "Global Gag Rule", for example, was first enacted by President Ronald Reagan in 1984. It mandates that foreign NGOs receiving US foreign assistance for family planning must not perform abortions or promote it as a method of family planning in any of their activities. Since 1984, the policy has been

rescinded by Democratic presidents and reinstated by Republican presidents. In 2017, the policy was reinstated and expanded by former President Trump to include all global health assistance beyond family planning. This expanded policy was rescinded by President Biden in 2021.

The Mexico City Policy's impacts on maternal health are well documented, with research showing that [the measure is associated with increased global rates of maternal mortality and unwanted pregnancy](#). In countries highly dependent on US funding, there was an estimated [increase of up to 4% in maternal and child mortality](#). And any future reinstating of the Mexico City Policy, particularly if in its expanded form, is likely to result in [an additional 2,700 maternal deaths every year](#). Under the expanded form of the policy, [health facilities also provided fewer family planning services](#), and saw more unintended pregnancies carried to term.



RECOMMENDATIONS

Urgent action is needed to address the stagnation in progress towards ending preventable maternal deaths. We present the following recommendations to improve maternal health outcomes globally:

Strengthen health systems and bolster innovations to ensure access to quality maternal health care:

Investing in health systems and emergency obstetric care around the world is key to managing complications due to postpartum hemorrhage, hypertensive disorders, sepsis, and unsafe abortion. Bolstering preventive care, including prenatal services, family planning and contraceptives, and comprehensive sexuality education can significantly reduce maternal deaths. Financial support for new and innovative solutions to prevent, diagnose, and treat maternal health complications is paramount. Finally, it is important to increase investment in skilled health professionals, such as nurses, midwives, and obstetricians, who are critical to prevent maternal deaths.

Prioritize social determinants of maternal health through research, investment, and policy action:

Implementing policies and programming to increase economic security, improve infrastructure in rural areas, and enhance health care access can address inequities created by social determinants of health. Increasing education for the health care workforce on social determinants can help address implicit biases and mitigate the adverse effects of discrimination on pregnancy outcomes. Maternal health services must be integrated with other health services provided for nutrition, HIV/AIDS, and non-communicable diseases, as well as with social services that tackle poverty and education, to address underlying determinants of maternal health.

Integrate maternal health into guidance related to humanitarian and fragile settings:

Guidance on essential life-saving activities in crises settings, like the [Interagency Field Manual on Reproductive Health in Humanitarian Settings](#) (IAFM) and the [Minimum Initial Service Package \(MISP\) for Sexual and Reproductive Health \(SRH\)](#) are key to reducing maternal deaths. The MISP for SRH must be fully implemented at the onset of every humanitarian crisis and then built upon throughout protracted crises and recovery in accordance with the IAFM. These activities must include respectful maternal and newborn health services, family planning and contraception, comprehensive abortion care, prevention of and response to gender-based violence, and the prevention and treatment of HIV and other sexually transmitted infections. Coordination within and beyond the health cluster, including with national stakeholders, is key to make referral linkages, improve the overall care for women and families, and strengthen health systems.

Ensure that maternal health services are included in climate change readiness:

Climate adaptation plans and disaster response for climate-related events must incorporate increased attention to the risks of maternal death and disability in these contexts to ensure that women's health and survival are not an afterthought. In the immediate aftermath of a climate-related disaster, health workers must be prepared to deliver life-saving maternal health care with minimal resources under stressful conditions. To do this, health workers, including midwives, must be properly trained and supported within their communities to use innovative and skilled techniques to provide respectful and culturally competent care.



Create evidence on the harmful effects of restrictive policies on maternal health outcomes:

Building a robust evidence base detailing the harms of restrictive policies that keep women from accessing health care services is critical for policymakers to understand the true consequences of such policies. Case examples across regions, nations, and government types that demonstrate lived consequences of policies that limit a woman’s reproductive autonomy and choice regarding when, how many, and with whom to have children would provide undisputable evidence that women’s health and security are harmed when their health care is restricted. Research has shown that the [status of women, including the rates of maternal death, in a nation are tied to the stability of that nation](#). Continuing to provide evidence to this fact within the women, peace, and security agenda while prioritizing human rights is key to improving the health and lives of women around the world.

Increase Global Investments in Maternal Health Services Globally:

The United States is the [largest donor government in all global health areas, including maternal and child health \(MCH\)](#), however, its funding allocated to MCH has increased only minimally since Fiscal Year 2015—and it has not kept up with inflation. Investing in maternal health yields significant returns by reducing maternal deaths, increasing women’s participation in the workforce, and elevating the economic security of a family. In total, an estimated [\\$115.5 billion USD is needed to end preventable deaths during pregnancy and childbirth in 120 countries](#) over the next 10 years. It is the responsibility of the global community to prioritize the health and safety of women during and after pregnancy.








Health extension worker Binti Mohammed counsels a woman on best nutrition practices at the health post in the village of Wolargi, in Gemechis, a woreda (district) of Oromia Region. (©UNICEF/NYHQ2014-3631/Nesbitt)











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