Maternal Malnutrition & Neonatal Outcomes in Gaza

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MSF Medical Findings from October 2024 to March 2026

Briefing Note & Key Messages

Multiple babies share one incubator in the neonatal intensive care unit of Al-Helou hospital, north Gaza, Palestine, July 2025.© Joanne Perry/MSF

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Overview: This document summarises MSF's medical findings on maternal and child malnutrition in Gaza, highlighting an unprecedented deterioration in the health and nutrition situation of mothers and their babies, in a context where acute malnutrition was almost non-existent before the war.[1]

MSF's medical data from **late 2024 through 2025 shows a sharp increase in malnutrition driven by restricted access to food, healthcare and essential services, peaking in 2025**. Some indicators have since stabilised, but levels remain clinically significant. Improvements have been fragile, uneven, and highly dependent on fluctuating access and insecurity, leaving **a continued risk of rapid deterioration** for vulnerable people in Gaza, especially pregnant women and their infants.

MSF's analysis shows a clear link between maternal malnutrition and adverse neonatal outcomes[2]**. Between late 2024 and early 2025, a quarter of the mothers to newborns at intensive care units who were assessed were affected by malnutrition.[3] Babies born from women with malnutrition were more likely to be premature, low-weight and their mortality was twice higher**. Outcomes from therapeutic feeding programmes for infants under six months highlight major barriers to care: fewer than half of those exiting treatment were cured, one third defaulted, primarily due to insecurity and displacement, and 7% died.

Key takeaway: This briefing note shows how deliberate and sustained restrictions on access to food, services, and healthcare have caused immediate and measurable harm, while access conditions and insecurity remain extremely unstable. The improvements seen are dependent on access. **Without sustained entry and distribution of food, medical supplies, and essential goods across Gaza, and without reliable access to healthcare and services, the risk of further deterioration remains high, particularly for pregnant women and children**.

Key Medical Findings
MSF's nutritional programme for infants under 6 months of age (U6m) (2024-2025)

As a nutritional crisis began to unfold in Gaza from October 2024 onwards, and in response to emerging needs, MSF implemented a **targeted nutritional programme for infants under six months old between October 2024 and December 2025,** in Al Attar and Al Mawasi primary healthcare centres in Khan Younis.

During this period:

- **513 infants under six months** were admitted to MSF nutritional care.
- **91%** of infants admitted had mothers with a maternal mid-upper arm circumference (MUAC)[4] **≤110 mm**, indicating a high risk of poor infant growth and development.

Programmatic outcomes highlighted key access constraints:

- **32% of infants defaulted** from care, a rate linked by MSF teams to **displacement, insecurity, service interruptions, and difficulty reaching facilities**, rather than lack of need.
- Reductions in admissions were observed during **late July and early August 2025**, coinciding with intensified bombardments in Gaza, heightened insecurity, and disrupted access to healthcare, as well as the drastically reduced availability of food on the markets. MSF staff reported that **many mothers requested nutritional**

[1] https://www.un.org/unispal/document/nutrition-cluster-annual-report-05feb25/

[2] Based on medical data collected in 4 MSF facilities, which cannot be interpreted as representative of the nutrition status of the entire population of Gaza.

[3] Whereas with children above six months of age it is normal to talk about acute malnutrition, which could be categorized in severe and moderate, currently the medical convention doesn't provide this distinction neither for pregnant and breastfeeding women nor for infants under six months. They are not labelled as 'malnourished' patients but as patients with a 'poor nutritional status' or 'nutritionally at risk'.

[4] A MUAC below 230 mm (23 cm) in adults typically indicates undernutrition or risk of malnutrition, with lower cutoffs (e.g., <210 mm) suggesting more severe deficiency.

support even before infants were classified as malnourished, reflecting widespread food insecurity linked to supply restrictions.

- Programme implementation was also constrained by **persistent shortages of essential nutritional supplies and repeated service interruptions, limiting continuity of care.**
- Barriers to optimal infant feeding include **maternal undernutrition, psychological stress** and **lack of privacy in overcrowded living conditions.** MSF's establishment of mother–baby safe spaces has supported breastfeeding practices and improved access to care.

Key takeaway: Clinical and nutritional services cannot function effectively when access to food, healthcare and safety are undermined by conflict, insecurity, forced displacement and restricted entry of supply.

Key Medical Findings
Maternal Malnutrition and Neonatal Outcomes in MSF-Supported NICUs (2025–2026)

As the situation further deteriorated in 2025, the impact of maternal malnutrition on neonatal outcomes became increasingly severe and measurable in hospital settings. **Between 12 June 2025 and 11 January 2026**, MSF supported neonatal intensive care units (NICUs) at Al Helou Hospital (Gaza City) and Nasser Hospital (Khan Younis) and collected clinical data on newborns and maternal nutritional status at delivery. During this period:

- **528 neonates** (newborns) were admitted to the two MSF-supported NICUs
- MUAC was measured for 201 mothers at or near time of delivery
- **51 mothers (25%) had a MUAC below 230mm**, indicating **maternal malnutrition at the time of delivery**, based on internationally accepted thresholds for risk of adverse pregnancy outcomes.

1. Prematurity
   - **90% of neonates were premature when born to malnourished mothers** (MUAC <230 mm)
   - 58% of neonates were premature when born to non-malnourished mothers (MUAC ≥230 mm)

2. Low birth weight
   - **84% of neonates born to malnourished mothers had low birth weight**
   - 60% of neonates born to non-malnourished mothers had low birth weight

3. Poor neonatal outcomes
   - **Babies born to malnourished mothers experienced substantially poorer outcomes**, including a higher proportion of deaths during NICU admission, consistent with well-established clinical evidence on the risks associated with maternal undernutrition.

Key message: Maternal malnutrition is strongly and measurably linked to significantly worse neonatal outcomes, including markedly higher rates of prematurity, low birth weight, and neonatal mortality.

Recent trends

Following the peak of the crisis during 2025, more recent data indicate a relative stabilisation, although malnutrition remains present and clinically significant, and conditions remain extremely fragile.

Between January and March 2026, data from MSF-supported facilities in Gaza indicate that malnutrition remains a persistent concern for both children and mothers. In the first quarter of 2026, a total of 383 children were admitted to MSF's ambulatory therapeutic feeding centres (ATFCs), including 133 cases of severe acute malnutrition (SAM) and 250 cases of moderate acute malnutrition (MAM). The majority of cases were among children aged between 1 and 5 years old, confirming the disproportionate impact on younger children, who are particularly vulnerable.

Between January and March 2026, data from Nasser Hospital and Al Helou Hospital indicate that maternal malnutrition remains a significant concern. **Out of 5,996 pregnant women, 1,461 (approximately 24%) were identified as malnourished. Adverse pregnancy and neonatal outcomes were also notable, with 251 babies born**

with low birth weight (around 4%), representing an 80% reduction of babies born with low birth weight compared to the last half of 2025 (84%). While these findings highlight the ongoing impact of maternal undernutrition on pregnancy and neonatal outcomes, including increased risks of complications for newborns, they also show the devastating impact that the 2025 blockade and conflict insecurity had on health outcomes, compared to the *relative* contextual improvements seen during the last ceasefire period, since October 2025.

Although lower than the peak levels observed in 2025, these figures remain clinically significant. Taken together, the persistence of maternal malnutrition alongside its documented impact on neonatal outcomes reinforces a consistent clinical pattern recognised in global medical literature: maternal malnutrition is a key contributor to increased risk of prematurity, low birth weight and greater vulnerability to complications in the neonatal period.

Contextual Drivers

Across MSF nutritional and maternal–child health programmes in Gaza, a set of interlinked and deliberate policies consistently exacerbated food insecurity, undermined access to healthcare, and directly worsened health outcomes for pregnant women and their infants. Contextual drivers during the reporting period included:

- Historically, maternal and child malnutrition barely existed in Gaza[5]. As a result, there was limited pre-existing capacity for screening, treatment, and continuity of care. As the situation evolved, MSF scaled up early detection and implemented targeted nutritional programmes to fill critical gaps in care.
- MSF teams first identified child malnutrition cases in January 2024, signaling a deteriorating nutritional context. By February 2026, 4,176 children under 15 years old, 97% under five years old, had been admitted for acute malnutrition, alongside 3,336 pregnant and breastfeeding women and girls receiving nutritional support. These figures show the rapid escalation of needs and the system's limited capacity to respond.
- Severe restrictions on the entry of food, fuel, medical supplies and essential goods, affecting both humanitarian and commercial supplies, with direct consequences for household food availability and maternal nutritional health during pregnancy and breastfeeding.
- Total blockade: On 2 March 2025, Israel imposed a total blockade on the entry of all humanitarian and commercial supplies, including food, fuel, and medicine, into the Gaza Strip. This marked the longest complete ban on aid since October 2023. Although limited aid entry partially resumed on 19 May 2025 via Kerem Shalom crossing, volumes remained far below required basic needs, and the blockade continued to have severe consequences on the health and wellbeing of the population.
- A sharp deterioration in safe and effective access to food assistance, particularly after late May 2025, when the humanitarian distribution system of 400 distribution points was replaced by just four distribution sites under the Gaza Humanitarian Foundation (GHF). These sites were militarised, inconsistently operational, inaccessible for much of the population, and associated with high levels of violence, insecurity, injury, and killings[6]. This significantly deterred and prevented the population, particularly pregnant women, from accessing food.
- High levels of insecurity surrounding aid delivery, which further discouraged families from seeking food assistance and contributed to gaps in nutrition coverage for the most vulnerable, including pregnant and breastfeeding women and girls, and young children.
- The collapse of the January 2025 ceasefire in mid-March 2025 led to a sharp resumption of intensive bombardments and military operations. This surge in violence further compounded displacement, insecurity, and damage to Gaza's already-dilapidated civilian infrastructure, including healthcare facilities.
- A healthcare system systemically attacked and operating under extreme strain, due to direct attacks on facilities, damage and destruction, staff shortages, repeated displacement of patients and health workers, disrupted referral pathways, and frequent interruptions to maternal, neonatal, and nutritional services. Overcrowding and

[5] https://www.un.org/unispal/document/nutrition-cluster-annual-report-05feb25/
[6] https://www.msf.org/not-aid-orchestrated-killing

insecurity reduced referral capacity and continuity of care, including for women identified as nutritionally at risk.

- IPC Phase 5 (Famine) classification for Gaza Governorate in August 2025, marking the first famine declaration in the Middle East and signalling extreme levels of food deprivation.
- Poor and undignified living conditions including overcrowding, lack of access to safe water and inadequate sanitation, further heightened vulnerability and compounded the impact of food insecurity.

Key takeaway: MSF data shows that these interlinked factors have rapidly driven a deterioration in maternal nutrition and neonatal outcomes in a setting where malnutrition was extremely rare.[7] While intermittent increases in food availability and humanitarian assistance have contributed to *some* stabilization, *the situation remains extremely fragile*.

Key Messages

MSF medical data demonstrates **a clear and alarming association between maternal malnutrition and poor neonatal outcomes in Gaza, including markedly higher rates of prematurity, low birth weight, and reduced chances of survival in the neonatal period.** The deliberate tactic of withholding of food had explicit medical consequences. When pregnant women were prevented from accessing sufficient food due to imposed blockages on supplies, their babies paid the price at birth, with immediate consequences to their health and survival.

- **These negative health and nutrition outcomes were *not* inevitable. Acute malnutrition had been historically almost non-existent in Gaza.** The deterioration documented by MSF and other actors in 2025, including the IPC Phase 5 Famine declaration for Gaza Governorate, followed prolonged, systemic restrictions on food supply, aid delivery, and access to essential services. **Restrictions on food and humanitarian access translate rapidly into medically measurable harm.** The reduction of food availability at household level directly undermines maternal nutritional status, with **immediate, measurable consequences for newborn health, including babies born too soon, too small, and too vulnerable to survive without intensive care**.
- **Emergency health and nutritional care cannot compensate for sustained deprivation of basic resources, and insecurity.** MSF teams delivered neonatal and nutritional care under extreme conditions, but *clinical interventions alone cannot prevent poor health outcomes when food, safety, and access are deliberately restricted*. **No amount of clinical expertise can offset prolonged denial of the necessities of life.**
- **Militarised and highly restricted aid delivery mechanisms proved deadly. Notably the GHF distribution sites further reduced safe and effective access to food assistance.** For pregnant women and their families, inconsistent and inaccessible food distribution significantly worsened nutritional risk and drastically increased exposure to violence, injury and even death.
- **The convergence of insecurity, violent conflict, blockades on supply and humanitarian access constraints serves as a stark warning.** When food supply and humanitarian access are restricted at scale, maternal and neonatal health outcomes deteriorate rapidly, with effects that persist well beyond an immediate nutritional crisis.
- **The current nutritional crisis in Gaza is not only about lack of access to food, but due to adequate nutritional diversity and quality, and affordability**. Beyond the sharp reduction in food entering Gaza and people's lack of income (78% unemployment rate[8]), further restrictions and closures of Gaza's borders were imposed in March 2026, following the start of the regional war with Iran. This has resulted in additional food shortages and price hikes, including of fresh nutritional foods such as fruits, vegetables, eggs, and animal protein. Families in Gaza are resorting to negative coping mechanisms, including skipping meals (1/day), reducing portion sizes, and relying on low calorie, nutrient-deficient food, which continue to increase the likelihood of poor maternal health and poor birth outcomes, linked to poor nutrition.

[7] https://www.un.org/unispal/document/nutrition-cluster-annual-report-05feb25/
[8] https://thedocs.worldbank.org/en/doc/65cf93926fdb3ea23b72f277fc249a72-0500042021/related/mpo-pse.pdf