

HUMAN RIGHTS WATCH

"Five Babies in One Incubator"

Violations of Pregnant Women's Rights Amid Israel's Assault on Gaza



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Amid Israel's Assault on Gaza

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Summary

R.M., 31, was two months pregnant when Israel began its military campaign in the Gaza Strip following the Hamas-led attack on southern Israel on October 7, 2023. Her family struggled to find food. "I was literally starving," she told Human Rights Watch. "We were all in famine in northern Gaza. We had no gas to cook with. We had one meal a day to conserve firewood. … Flour was very, very expensive. No food. No chicken. No meat. I lost a lot of weight."

She also had health problems: "I already had low blood pressure and would faint a lot. I got lightheaded and dizzy. I had no energy, couldn't stand on my own." The family went to Rafah and visited a doctor in his private clinic for a checkup, but he could provide no examination beyond an ultrasound or give her any vitamins or calcium. R.M. suffered multiple urinary tract infections but did not go to a clinic because she had heard they had no medicine.

The fighting complicated R.M.'s difficult delivery on May 5. "I went into labor at 2 a.m.," she said. "I was in so much pain, and we were trying to find a way to reach the hospital." She said that at the hospital, she was not given any medication or an epidural. After she delivered, she had to change the pads she was wearing herself. "I went to the bathroom alone. It was terrible, very difficult," she said. "No one took care of me. Not a single nurse came to check up on me, monitor me, or ask how I was."

R.M. left the hospital at 6 a.m., just over four hours after giving birth to a girl. "I was exhausted and couldn't walk," she said. "I was holding my newborn, and with my husband and three other children, we had to look for someone willing to drive us [to my parents' home]. It took hours until a car stopped for us. My husband told the driver we would give him anything [if he drove us]."

A few days later, R.M.'s family was forced to evacuate Rafah for Khan Younis, where they have been living in a tent under harsh conditions. Her newborn daughter quickly developed diarrhea, which can be <u>life-threatening</u>.

R.M.'s difficult pregnancy and delivery reflect the extraordinary challenges faced by many Palestinian women and girls in the Gaza Strip since the beginning of the hostilities. Across Gaza, women have had limited access to safe places to give birth, even when they face a high-risk delivery.

Since the hostilities started in Gaza, Israel has imposed an unlawful blockade of the territory, imposed several restrictions on humanitarian aid, and <u>attacked medical facilities</u> and personnel. In mid-January, Israeli authorities and Hamas agreed to a multi-phase ceasefire that includes the entry into Gaza of humanitarian aid, the return of Israeli hostages held in Gaza, and the release of Palestinian prisoners.

As of January 2025, emergency obstetric and newborn care is only <u>available</u> at seven out of 18 partially functioning hospitals across Gaza, four out of 11 field hospitals, and one community health center, compared to a total of 20 hospitals and other smaller healthcare facilities that functioned before October 7, 2023. The World Health Organization shared with Human Rights Watch an assessment of needs that identified 19 types of medical equipment and 24 types of medication for prenatal, delivery and postnatal care that were in short supply and urgently needed as of December 2024.

The quality of health care offered by the few remaining medical facilities and service providers is severely diminished. Women like R.M. are <u>rushed</u> out of sometimes packed hospitals within a few hours of childbirth to make room for other patients, many of them war casualties. All medical facilities operating in Gaza face unsanitary and overcrowded conditions and serious shortages of essential healthcare goods including medicine and vaccines. Medical workers, hungry, overworked and at times under military attack, try to triage and attend to the many victims of attacks, while also addressing increasing cases of water-borne and other communicable diseases.

Israeli authorities' military offensive has led to the <u>forced displacement</u> of over <u>90 percent</u> of the population of Gaza—1.9 million Palestinians—often multiple times, amounting to war crimes and crimes against humanity. As a result, it is usually impossible to inform women of where they can safely access health services, and hard for women to reach the few services that are available. The constant displacement of the population as so-called "safe areas" change and because of frequent Israeli military evacuation orders has made it

nearly impossible for community networks to establish themselves and for healthcare workers and volunteers to track individual pregnancies or families' needs. Consequently, women and newborns rarely have <u>access</u> to follow-up and postnatal health care.

There is little information available on the survival rate of newborns or the number of women experiencing severe morbidities or dying during pregnancy, while giving birth, or postpartum. However, in July, maternal health experts <u>reported</u> that the rate of miscarriage in Gaza had increased by up to 300 percent since October 7, 2023.

From March to April 2024, UN Women <u>surveyed</u> 305 women across Gaza's five governorates, or regions, including 37 pregnant women.¹ Of these pregnant women, 68 percent had experienced medical complications. Of the 68 percent, 92 percent reported urinary tract infections (UTIs), 76 percent anemia, 44 percent hypertensive disorders, and 28 percent preterm labor. Other concerns included bleeding (20 percent), hemorrhage (16 percent), and stillbirth (12 percent). Before October 2023, the rates of such medical complications were considerably lower.²

Israel's blockade of Gaza in violation of international humanitarian law and the use of starvation as a method of warfare have <u>caused</u> acute food insecurity for most people living in Gaza. As of October 17, 2024, nearly 133,000 people <u>faced</u> catastrophic or famine-levels of food insecurity, and 664,000 faced emergency levels of shortages, according to the Integrated Food Security Phase Classification (IPC).³ The IPC also reported an estimated

¹ While not representative of all pregnant women, data from these interviews is indicative of severe maternal health challenges.

² Global prevalence of UTIs in pregnant women is 29 percent. Salari N, Khoshbakht Y, Hemmati M, Khodayari Y, Khaleghi AA, Jafari F, Shohaimi S, Mohammadi M, "Global prevalence of urinary tract infection in pregnant mothers: a systematic review and meta-analysis," *PMID Public Health*, November 22, 2023, https://pubmed.ncbi.nlm.nih.gov/37734277/ (accessed December 4, 2024). 2022 data from the West Bank found anemia rates between 27 and 30 percent; the rate of preterm labor was 6 percent in the West Bank in 2022; the rate of pregnant women experiencing bleeding was 1.8 percent in the West Bank in 2022; the rate of women who experienced stillbirths was 0.5 percent in Gaza in 2022; the rate of pregnant women experiencing hemorrhage was 3 percent in the West Bank in 2022, "Annual Report 2022 The Israeli Aggression Against Palestinians in 2022," *Palestinian Ministry of Health Emergency Operation Center*, 2022, https://site.moh.ps/Content/Books/GIKYy552PXX22CWg3V4Y9xBoZeA4DCph2WQYwst1lc4rnbpPj7ZZVn_yc6X9qgxEEnl1zmY xveLqvpVVcg9gloXEL1g7j99MbLzUGnnTsKjjk.pdf (accessed December 5, 2024). 2023 data from Gaza found 7.7 percent of pregnant women with hypertension, UNRWA, Department of Health, Annual Report 2023, May 2023, Figure 15, https://www.unrwa.org/sites/default/files/content/resources/annual_report_2023_26_may_2023_good_resolution_5.3m_compressed.pdf (accessed December 4, 2024).

³ The Integrated Food Security Phase Classification (IPC) is "a set of tools and processes to analyse and classify the severity of acute chronic food insecurity situation according to scientific international standards." The initiative is led by 12 global

60,000 cases of acute malnutrition among children between the ages of 6 and 59 months, and 16,500 cases of pregnant and breastfeeding women who needed treatment for acute malnutrition. The United Nations Population Fund (UNFPA) reported that at the end of December 2024, over 48,000 pregnant women were experiencing emergency and catastrophic food insecurity. In such circumstances, pregnant women in Gaza cannot maintain the good nutrition and healthy diet critical for their own health during pregnancy and postpartum, and for fetal development.

Limited access to safe water is a major problem for pregnant women in Gaza. Many have reported dehydration and some have said they are only able to access highly saline water. Others spoke of being unable to wash themselves throughout their pregnancy. The lack of access to adequate nutrition, water, and sanitation has serious health consequences, particularly for pregnant women and girls and their children. Many health conditions may be caused or significantly worsened by such deprivation, including anemia, eclampsia, hemorrhage and sepsis, all of which can be <u>fatal</u> without proper medical treatment, which has been very hard to access in some parts of Gaza.

Pregnant women in Gaza also described how, like many others in Gaza, their mental health has been under immense strain since the start of the hostilities.

Pregnant women in Gaza have very few options to seek better conditions outside Gaza. According to the <u>World Health Organization</u>, of the over 12,000 people in need of medical evacuations, the requests of only 5,383 have been approved and carried out. Since Israel's closure of the Rafah crossing between Gaza and Egypt between May 2024 and January 2025, only 436 patients could medically <u>evacuate</u> from Gaza.

Armed conflict between Israel and Hamas and Palestinian armed groups in Gaza is governed by international humanitarian law. As the occupying power in Gaza, Israel is

agencies including the United Nations World Food Programme, Action Against Hunger, Save the Children, and others. "Integrated Food Security Phase Classification," *The Integrated Food Security Phase Classification (IPC)*, February 2017, https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/1_IPC_Brochure_2017.pdf (accessed December 10, 2024). In this classification, Catastrophe/ Famine is Phase 5, or the most severe classification, in which "starvation, death, destitution and extremely critical acute malnutrition levels are evident" and Emergency is Phase 4, in which significant reduction in food consumption "is reflected in very high acute malnutrition and excess mortality." "Understanding the Scales," *The Integrated Food Security Phase Classification (IPC)* Evidence and Standards for Better Food Security and Nutrition, https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/communication_tools/brochures/IPC_Brochure_Understanding_the_IPC_Scales.pdf (accessed December 10, 2024).

obligated under the Fourth Geneva Convention to ensure that the civilian population gets food, water, and medical supplies to the fullest extent of the means available to it. Israel needs to maintain at a reasonable level the material conditions under which the population of the occupied territory lives. In addition, the Fourth Geneva Convention provides that expectant mothers shall be the object of particular protection and respect. Israel is obligated to allow the free passage of all consignments of medical and hospital stores and of essential foodstuffs, clothing, and medical supplies intended for children under 15, expectant mothers, and maternity cases.

Human Rights Watch has <u>found</u> that Israeli forces in Gaza imposed a near total ban on water, food, and electricity and used starvation as a method of war, which are war crimes, and committed crimes against humanity by repeated forced transfers of the population. They have also unlawfully obstructed the delivery of humanitarian aid and attacked medical facilities and healthcare personnel. These policies have had a direct effect on women and girls in pregnancy, childbirth, and postpartum.

Since October 2023, Israeli authorities have deliberately obstructed Palestinians' access to water. Between October 2023 and July 2024, the more than 2 million Palestinians in Gaza had access to an average of between 2 and 9 liters of water per day, far below the minimum emergency humanitarian standards of 15 liters per capita per day recommended by the World Health Organization. Israeli authorities have intentionally deprived Palestinian civilians in the Gaza Strip of adequate access to water since October 2023 and are responsible for the crime against humanity of extermination and acts of genocide, and may be responsible for the crime of genocide, which requires acts of genocide to be committed with genocidal intent.

The Israeli military has obstructed humanitarian aid entering Gaza, first by banning it outright and later by imposing onerous restrictions. According to OCHA, since May, humanitarian aid entering Gaza has dropped dramatically. The situation worsened significantly in October 2024, with approximately 43 percent of all humanitarian movements coordinated with Israeli authorities to reach those in need across the Gaza Strip being denied, marking the highest rate of denial of access recorded since the hostilities began in October 2023.

Israel is a party to the International Covenant on Economic, Social and Cultural Rights (ICESCR), which remains in effect during armed conflict where Israel has effective control. Israeli authorities have violated the rights to the highest attainable standard of health and other rights of pregnant women and girls. This includes the right to dignified, respectful health care throughout pregnancy, childbirth, and postpartum and newborn care, as well as adequate access to food, water, and adequate housing.

Israel should ensure that its conduct complies with its obligations under international humanitarian and human rights law, as well as the legally binding orders from the International Court of Justice in South Africa's case alleging that Israel is violating the Genocide Convention of 1948. The court has issued provisional measures that include requiring Israel to prevent genocide against Palestinians in Gaza, enable the provision of basic services and humanitarian assistance, and prevent and punish incitement to commit genocide.

Israel should immediately cease all unlawful attacks, including attacks targeting healthcare facilities, workers, and transportation; civilian infrastructure essential for the rights to food, water, and housing; and aid workers. It should stop obstructing the delivery and dispersal of humanitarian assistance and end the arbitrary detention of healthcare workers in Gaza. When issuing evacuation orders, Israel should take into account the needs of pregnant women, as well as civilians with disabilities and those who are sick or injured, and ensure that evacuation areas can provide for their needs.

Israel is also obligated to use all the resources at its disposal to ensure that everyone in Gaza, including pregnant women and girls and their children, are able to enjoy their human right to health. This includes ensuring the full restoration of Gaza's healthcare system so that all patients, including pregnant women and babies, have access to quality medical care.

Under human rights law, all civilians have the right to leave their country, including for medical reasons, as well as the right to return. Israel should lift the closure of the Gaza Strip and permit the free movement of civilians to and from the Gaza Strip, subject to individual screenings and physical inspections for security purposes only as necessary, with transparent requirements.

Methodology

Human Rights Watch has been denied access to the Gaza Strip despite repeated requests to the Israeli and Egyptian authorities. For this report, Human Rights Watch interviewed 17 people between June and December 2024, including eight Palestinian women who had been pregnant while living in Gaza during the hostilities. The interviews were conducted either remotely or in person in Doha, Qatar. Two of the women lost their fetuses due to explosive weapons attacks that injured them. Human Rights Watch also spoke to six medical workers from Gaza who had firsthand knowledge of the situation faced by pregnant women after October 7, 2023. Human Rights Watch also interviewed international medical staff working at three international humanitarian organizations and agencies operating teams in Gaza about the provision of care to pregnant women.

Researchers informed all interviewees about the purpose and voluntary nature of the interviews, and the ways in which Human Rights Watch would use the information. We obtained consent from all interviewees, who understood they would receive no compensation for their participation.

This report draws on additional research conducted by Human Rights Watch on the Israeli military's offensive in Gaza since October 7, 2023, including into the use of explosive weapons in attacks, access to essential elements for survival including food and water, forced displacement, blockages in incoming lifesaving humanitarian aid, unlawful attacks on known locations of aid workers, and the arbitrary detention and torture of Palestinian medical workers.⁴

^{4 &}quot;Gaza: Israeli Strike Killing 106 Civilians an Apparent War Crime, Governments Should Suspend Arms to Israel, Support ICC Probe," Human Rights Watch news release, April 4, 2024, https://www.hrw.org/news/2024/04/04/gaza-israeli-strike-killing-106-civilians-apparent-war-crime; "Gaza: Israeli Forces Open Fire While Storming Home, Investigate Unlawful Killings of Eight Civilians," Human Rights Watch news release, August 8, 2024, https://www.hrw.org/news/2024/08/08/gaza-israeli-forces-open-fire-while-storming-home; "Israeli Authorities' Cutting of Water Leading to Public Health Crisis in Gaza: End Blockade, Restore Water and Electricity, Allow in Fuel," Human Rights Watch Dispatch, November 16, 2023, https://www.hrw.org/news/2023/11/16/israeli-authorities-cutting-water-leading-public-health-crisis-gaza; "Israel: Unlawful Gaza Blockade Deadly for Children: Denial of Water, Fuel, Electricity Endangers Live," Human Rights Watch news release, October 18, 2023, https://www.hrw.org/news/2023/10/18/israel-unlawful-gaza-blockade-deadly-children; "Gaza's Blocked Relief: Israeli Government Continues to Obstruct Desperately Needed Humanitarian Aid," Human Rights Watch op-ed, October 30, 2023, https://www.hrw.org/news/2023/10/30/gazas-blocked-relief; "Gaza: Israelis Attacking Known Aid Worker Locations, End Unlawful Attacks, Ensure Accountability," Human Rights Watch news release, May 14, 2024, https://www.hrw.org/news/2024/05/14/gaza-israelis-attacking-known-aid-worker-locations; "Israel: Palestinian Healthcare Workers Tortured, ICC Prosecutor Should Investigate Attacks on Health Care, Detainee Abuses," Human Rights Watch news release, August 26, 2024, https://www.hrw.org/news/2024/08/26/israel-palestinian-healthcare-workers-tortured.

While women and girls in Gaza face many hardships, including those related to their sexual and reproductive health and rights, such as contraception and safe abortion care, this report is limited to maternal and newborn health.

I. Impact of Israeli Military Operations on Pregnant Women and Maternal Health

Israel's blockade of Gaza and its military's conduct of hostilities have resulted in deaths and injuries to pregnant women and girls and deprived them of consistent access to health care. Israeli forces have imposed forcible displacement that has been especially harmful to pregnant women. They have also attacked and degraded communications infrastructure, limiting women's access to functioning healthcare facilities, medication, and other goods essential for their health during and after pregnancy. Israel's blockade has also largely prevented pregnant women who need access to medical care abroad from being able to leave Gaza safely.

Deaths and Injuries

As of January 9, Israeli military operations had resulted in the deaths of more than 46,000 Palestinians and injuries to over 100,000 others, according to Gaza's Ministry of Health. This includes at least 14,555 children, of whom 793 were under one year of age.

Because of the lack of adequate data and the destruction of Gaza's health monitoring capacity, Human Rights Watch was unable to assess either the total number of incidents in which pregnant women and girls were injured or died, or the number of instances in which such attacks caused the death of a pregnant woman's fetus. However, Human Rights Watch has reported on Israeli attacks in the course of the hostilities in which pregnant women were killed or injured.

In December 2023, Israeli forces stormed into a home in Gaza City and opened fire on a room where a family was sheltering, killing seven people including a pregnant woman.⁶ Gaza resident Hassan Abu Abeid described an October 19, 2023, attack that killed 30

⁵ According to the Gaza Ministry of Health, as of December 2024, more than 46,6142 Palestinians have reportedly been killed, many of them women and children, and 108,379 injured. Thousands more are missing and believed to be trapped under the rubble. "Repercussions of Israeli Aggression on Health Sector," Gaza Ministry of Health, January 9, 2025, https://www.facebook.com/photo/?fbid=924650893173187&set=pcb.924651029839840 (accessed January 11, 2025).

⁶ Israeli forces stormed a Gaza City home on December 21, 2023, throwing grenades inside and opening fire on a room where a family was sheltering. The attack killed seven people, including a pregnant woman. "Gaza: Israeli Forces Open Fire While Storming Home, Investigate Unlawful Killings of Eight Civilians," Human Rights Watch news release, August 8, 2024, https://www.hrw.org/news/2024/08/08/gaza-israeli-forces-open-fire-while-storming-home.

members of his family, including his wife and two of their children. His wife was sixmonths pregnant—the couple was expecting a boy whom they planned to call Adam.⁷

For this report, researchers also spoke with two women who lost their pregnancies due to injuries sustained during explosive weapons attacks.

Forced Displacement

Israeli military operations have led to the forced displacement of over 90 percent of the population of Gaza—1.9 million Palestinians—often multiple times.8 Most have been displaced at least once, with many displaced up to 10 times since October 7.9

The constant displacement of people has disconnected pregnant women from adequate health care. It makes it extremely challenging for them to receive relevant health information, to follow providers' recommendations, and to access vital prenatal services like checkups and screening appointments. As of January 8, 2025, UNICEF reported the deaths of eight infants and newborns from hypothermia since December 26, 2024, due to continued lack of basic shelter combined with winter temperatures.¹⁰

A senior aid official said that because of the constant displacements, healthcare workers, humanitarian workers and volunteers found it impossible to follow up with women and their babies on their health outcomes and to find out, for example, if a woman or her baby died during or right after childbirth.¹¹

⁷ Human Rights Watch interview with Hassan Abu Abeid, Doha, June 29, 2024.

^{8 &}quot;Israel's Crimes Against Humanity in Gaza, Mass Forced Displacement and Widespread Destruction," Human Rights Watch news release, November 14, 2024, https://www.hrw.org/news/2024/11/14/israels-crimes-against-humanity-gaza; "Reported impact snapshot| Gaza Strip (8 January 2025)," OCHA, January 8, 2025, https://www.ochaopt.org/content/reported-impact-snapshot-gaza-strip-8-january-2025 (accessed January 11, 2025); UNRWA Situation Report #152 on the situation in the Gaza Strip and the West Bank, including East Jerusalem, UNRWA, December 22, 2024, https://www.unrwa.org/resources/reports/unrwa-situation-report-152-situation-gaza-strip-and-west-bank-including-east-

https://www.unrwa.org/resources/reports/unrwa-situation-report-152-situation-gaza-strip-and-west-bank-including-east jerusalem (accessed January 11, 2025).

⁹ UNRWA Situation Report #118 on the situation in the Gaza Strip and the West Bank, including East Jerusalem, UNRWA, July 5, 2024, https://www.unrwa.org/resources/reports/unrwa-situation-report-118-situation-gaza-strip-and-west-bank-including-east-Jerusalem (accessed November 11, 2024).

¹⁰ "New year brings little new hope for children in Gaza, with at least 74 children reportedly killed in first week of 2025," UNICEF, January 8, 2025, https://www.unicef.org/press-releases/new-year-brings-little-new-hope-children-gaza-least-74-children-reportedly-killed (accessed January 13, 2025).

¹¹ Human Rights Watch remote interview with Rondi Anderson, Senior Technical Advisor for Reproductive, Maternal, Newborn, and Child Health, Project HOPE, August 7, 2024.

Lack of Communication Mechanisms

The Israeli government's degradation of Gaza's communication infrastructure has also severely hampered humanitarian efforts to coordinate assistance and disseminate up-to-date information. Human Rights Watch documented phone and internet disruption in Gaza as a result of the Israeli military's numerous airstrikes. The Israeli authorities' actions have included damage to core communications infrastructure, cuts to electricity, fuel blockades, and apparently deliberate shutdowns through technical measures.

In October 2024, OCHA reported that the lack of communications has "brought the already challenging delivery of humanitarian assistance to a complete halt and is depriving people of life-saving information." Disruptions to electricity and telecommunication services have also made hotlines to support women giving birth at home unreachable, compounding the risks for women, according to the UN-mandated Independent International Commission of Inquiry on the Occupied Palestinian Territory, including East Jerusalem and Israel (Commission of Inquiry). A United Nations Population Fund (UNFPA) representative said that because UN and service provider teams in Gaza did not have access to printers, they could not print flyers to give women to tell them where services were available—information that was critical because providers had to constantly relocate operations. These factors also reduced the ability of healthcare providers to engage with networks of midwives and aid delivery partners.

¹² "Gaza: Communications Blackout Imminent Due to Fuel Shortage, Israel Should End Blockade, Restore Services," Human Rights Watch news release, November 15, 2023, https://www.hrw.org/news/2023/11/15/gaza-communications-blackout-imminent-due-fuel-shortage.

¹³ OCHA stated: "In the North Gaza governorate, the Israeli military has been carrying out a ground offensive since 6 October and imposed a tightened siege particularly around the area of Jabalya refugee camp, amid a near total lack of humanitarian aid entering as well as severe communications and internet disruptions. Efforts to deliver life-saving assistance to communities and families in high-risk zones have been hampered." "Humanitarian Situation Update #233 | Gaza Strip," OCHA, October 29, 2024, https://www.ochaopt.org/content/humanitarian-situation-update-233-gaza-strip (accessed November 11, 2024; Hadeel al-Shalchi, "Destruction from the war with Israel has cut Gaza off from the outside world," NPR, March 3, 2024, https://www.npr.org/2024/03/03/1229402063/gaza-communications-cell-phone-internet-service-blackouts-paltel (accessed November 11, 2024); "Gaza: Communications Blackout Imminent Due to Fuel Shortage, Israel Should End Blockade, Restore Services," Human Rights Watch news release, November 15, 2023, https://www.hrw.org/news/2023/11/15/gaza-communications-blackout-imminent-due-fuel-shortage.

¹⁴ Report of the Independent International Commission of Inquiry on the Occupied Palestinian Territory, including East Jerusalem, and Israel, United Nations General Assembly, September 11, 2024, A/79/232, https://documents.un.org/doc/undoc/gen/n24/262/79/pdf/n2426279.pdf para 32.

¹⁵ Human Rights Watch interview with Nadine Cornier, Head of Programme Support Unit, UNFPA, Doha, August 12,2024.

The Israeli Blockade and its Restrictions

The Israeli government has occupied the Gaza Strip since June 1967. For the past 17 years, it has imposed a closure on Gaza, and has, with exceptions on narrow grounds, banned Palestinians from leaving. Israeli authorities have also imposed sweeping restrictions on the entry of various goods, including food as well as other essentials vital for the realization of economic rights. Is

Despite the impacts of the blockade on Gaza, the territory had a relatively robust maternal healthcare system prior to October 2023. PResidents had regular access to maternal health care in centers and hospitals run by the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) or the Gaza Ministry of Health, or in private facilities.

Immediately after the Hamas-led October 7 attacks in southern Israel, Israeli authorities cut off essential public services, including water and electricity, to Gaza's population and blocked the entry of all but a trickle of fuel and humanitarian aid, acts that amount to war crimes.²⁰

¹⁶ The International Committee of the Red Cross (ICRC) considers the West Bank, including East Jerusalem, as well as the Gaza Strip, which constitute the Occupied Palestinian Territory, as remaining under Israeli occupation governed by treaty and customary rules. "Frequently asked questions on the ICRC's work in Israel and the occupied territories," ICRC, December 20, 2023, https://www.icrc.org/en/document/Frequently-asked-questions-icrcs-work-Israel-and-occupied-territories (accessed October 15, 2024). "Separating land, separating people: A new position paper by Gisha analyzes what Israel calls the 'separation policy', in the context of control over the Palestinian territory," *Gisha*, June 28, 2015, https://gisha.org/en/separating-land-separating-people/ (accessed November 7, 2024).

¹⁷ Human Rights Watch, "Unwilling or Unable: Israeli Restrictions on Access to and from Gaza for Human Rights Workers," https://www.hrw.org/report/2017/04/02/unwilling-or-unable/israeli-restrictions-access-and-gaza-human-rights-workers; "Israel: Record-Low in Gaza Medical Permits: 54 Died in 2017 Awaiting Israeli Permit," Human Rights Watch news release, February 13, 2018, https://www.hrw.org/news/2018/02/13/israel-record-low-gaza-medical-permits.

¹⁸ Greg Myre, "Gaza Crossings: Choked Passages to Frustration," *New York Times,* March 4, 2006, https://www.nytimes.com/2006/03/04/world/middleeast/gaza-crossings-choked-passages-to-frustration.html (accessed November 7, 2024); "Agreed Principles for Rafah Crossing (APRC)", European Union Border Assistance Mission, n.d., https://eubam-rafah.eu/sites/default/files/u173/Agreed%20Principles%20for%20Rafah%20Crossing.pdf (accessed November 8, 2024).

¹⁹ "Gaza's Silent Killings: The destruction of the healthcare system and the struggle for survival in Rafah," MSF, April 2024, https://www.msf.org/sites/default/files/2024-04/MSF-GazaSilentKillings-Full%20Report_ENG_April%202023.pdf (accessed October 31, 2024).

²⁰ "October 7 Crimes Against Humanity, War Crimes by Hamas-led Groups: Armed Groups Holding Hostages Should Free Them Immediately," Human Rights Watch news release, July 17, 2024, https://www.hrw.org/news/2024/07/17/october-7-crimes-against-humanity-war-crimes-hamas-led-groups; "Israeli Authorities' Cutting of Water Leading to Public Health Crisis in Gaza: End Blockade, Restore Water and Electricity, Allow in Fuel," Human Rights Watch Dispatch, November 16, 2023, https://www.hrw.org/news/2023/11/16/israeli-authorities-cutting-water-leading-public-health-crisis-gaza; "Israel: Unlawful

Medical workers said that as a result of these restrictions, there have been both chronic and acute shortages of essential medicine, including insulin, antibiotics, analgesics and anesthetics.²¹ The blockade has also severely limited access to other healthcare resources essential for the right to health, including vaccines and medical devices and equipment.

Israel has used starvation as a weapon of war in Gaza, which is a war crime.²² Human Rights Watch found that Israeli forces were deliberately blocking the delivery of water, food and fuel, while willfully impeding humanitarian assistance, apparently razing agricultural areas deliberately, and depriving the civilian population of goods and services indispensable for their survival.

Since January 2024, the International Court of Justice (ICJ) has three times ordered Israel to enable the provision of basic services and humanitarian assistance into Gaza. But Human Rights Watch research found that Israel has contravened the court's legally binding orders by continuing to obstruct the entry of lifesaving aid and services into Gaza.²³

Gaza Blockade Deadly for Children: Denial of Water, Fuel, Electricity Endangers Live," Human Rights Watch news release, October 18, 2023, https://www.hrw.org/news/2023/10/18/israel-unlawful-gaza-blockade-deadly-children; "Gaza's Blocked Relief: Israeli Government Continues to Obstruct Desperately Needed Humanitarian Aid," Human Rights Watch Op-ed, October 30, 2023, https://www.hrw.org/news/2023/10/30/gazas-blocked-relief.

²¹ "Gaza Blockade Puts People with Diabetes at Risk, Dire Insulin Shortage Potentially Life-Threatening," Human Rights Watch Dispatch, December 15, 2023, https://www.hrw.org/news/2023/12/15/gaza-blockade-puts-people-diabetes-risk; "Gaza: Critical shortages of medical supplies in MSF-supported facilities, Israel's closure of the Rafah crossing continues to deprive Palestinians of humanitarian aid," MSF, June 21, 2024, https://www.doctorswithoutborders.org/latest/msf-supported-facilities-across-gaza-face-critical-shortages-medical-supplies (accessed November 11, 2024).

²² "Israel: Starvation Used as Weapon of War in Gaza: Evidence Indicates Civilians Deliberately Denied Access to Food, Water," Human Rights Watch news release, December 18, 2023, https://www.hrw.org/news/2023/12/18/israel-starvation-used-weapon-war-gaza.

²³ The ICJ has ordered three provisional measures in South Africa's case alleging that Israel is violating the Genocide Convention of 1948. On January 26, 2024, it ordered Israel to "take immediate and effective measures to enable the provision of urgently needed basic services and humanitarian assistance...in the Gaza Strip." "Gaza: Israel Flouts World Court Orders, Aid Still Being Obstructed Despite Famine," Human Rights Watch news release, May 7, 2024, https://www.hrw.org/news/2024/05/07/gaza-israel-flouts-world-court-

orders#:~:text=On%20January%2026%2C%20the%20ICJ,ensure%20the%20unhindered%20provision%20of. Despite this binding order, Israel continued to restrict or block aid. Noting that "catastrophic living conditions of the Palestinians in the Gaza Strip have deteriorated further," and citing "the prolonged and widespread deprivation of food and other basic necessities," the ICJ issued further measures in March 2024 ordering Israel to ensure the provision of urgently needed social services and humanitarian assistance, "including food, water, fuel, shelter, clothing, hygiene and sanitation requirements, alongside medical assistance, including medical supplies and support." "Israel defying ICJ ruling to prevent genocide by failing to allow adequate humanitarian aid to reach Gaza," Amnesty International, February 26, 2024, https://www.amnesty.org/en/latest/news/2024/02/israel-defying-icj-ruling-to-prevent-genocide-by-failing-to-allow-adequate-humanitarian-aid-to-reach-

gaza/#:~:text=A%20UN%20Security%20Council%20resolution,Despite%20this%20legally%20binding%20resolution (accessed November 11, 2024); "Application Of The Convention On The Prevention And Punishment Of The Crime Of

Limited Medical Evacuations

Prior to and during the hostilities, Israel and Egypt have prevented most people in Gaza from leaving, even those requiring lifesaving medical care not available in Gaza. According to the World Health Organization (WHO), of the over 12,000 people in need of medical evacuations, only 5,383 requests have been approved and carried out.²⁴ About 25,000 sick and wounded patients are in need of medical treatment they can only receive abroad, including 12,500 cancer patients, according to Gaza's Health Ministry.²⁵ Since Israel's closure of the Rafah crossing between Gaza and Egypt between May 2024 and January 2025, only 436 patients were able to medically evacuate Gaza, according to WHO.²⁶

Gaza's medical system has a strict triage rubric in place, with the Health Ministry only requesting medical evacuations for those in the most critical need of urgent care that Gaza's medical facilities cannot currently provide, based on lists submitted on a regular basis by all hospital directors. The Health Ministry shares its consolidated list with Egyptian health authorities, which then shares the list with the Coordinator of Government Activities in the Territories (COGAT), a unit in Israel's Ministry of Defense. COGAT decides which individuals on the list to give security clearance to, and thus permission to evacuate

Genocide In The Gaza Strip (South Africa V. Israel)", ICJ, March 28, 2024, https://www.icj-cij.org/sites/default/files/case-related/192/192-20240328-ord-01-00-en.pdf (accessed November 11, 2024). A third ICJ order issued on May 24 required Israel to "maintain open the Rafah crossing for unhindered provision at scale of urgently needed basic services and humanitarian assistance." "Summary of ICJ's Order of 24 May 2024 – Request for the modification of the Order of 28 March 2024 – Application of the Convention on the Prevention and Punishment of the Crime of Genocide in the Gaza Strip (South Africa v. Israel)," United Nations press release, June 2024, https://www.un.org/unispal/document/summary-of-icjs-order-24may24/ (accessed November 11, 2024). The Rafah crossing has however remained closed since Israeli forces took control of it on May 7. Aaron Boxerman, "A Border Crossing Shuttered for Months Traps the Sick and Wounded in Gaza," *New York Times*, July 19, 2024, https://www.nytimes.com/2024/07/19/world/middleeast/rafah-palestinians-gaza-trapped.html (accessed November 11, 2024).

²⁴ "Statement by WHO Director-General Dr Tedros on evacuations of patients from Gaza," World Health Organization, January 2, 2025, https://reliefweb.int/report/occupied-palestinian-territory/statement-who-director-general-dr-tedros-evacuations-patients-gaza (accessed January 8, 2025).

post to Facebook, October 5, 2024, غزة/ الفلسطينية الصحة وزارة 25

https://www.facebook.com/photo.php?fbid=859599656344978&set=pb.100068848555061.-2207520000&type=3
(accessed November 11, 2024); غزة/ الفلسطينية الصحة وزارة post to Facebook, October 5, 2024,
https://www.facebook.com/photo?fbid=850632303138485et=pb.100068848555061.-2207520000 (accessed Nove

https://www.facebook.com/photo?fbid=859602293011381&set=pb.100068848555061.-2207520000 (accessed November 11, 2024).

²⁶ "Statement by WHO Director-General Dr Tedros on evacuations of patients from Gaza," World Health Organization, January 2, 2025, https://reliefweb.int/report/occupied-palestinian-territory/statement-who-director-general-dr-tedros-evacuations-patients-gaza (accessed January 8, 2025).

to Egypt.²⁷ Dr. Khalid Abu Samra, an internal medicine specialist in Gaza, said hospitals only request evacuation permission for pregnant women if they have preeclampsia or a history of immune disease or acute cancer.²⁸ Dr. Abu Samra's sister, a nasopharynx cancer survivor, was the only woman Human Rights Watch was able to identify who was medically evacuated from Gaza during pregnancy because of her medical history.

²⁷ "Gaza: Palestinians are dying amid lethal evacuation delays," *UN News*, October 25, 2024, https://news.un.org/en/story/2024/10/1156121 (accessed November 19, 2024); Human Rights Watch interview with Dr. Khalid Abu Samra, internal medicine, Shifa Hospital, Doha, June 29, 2024.

²⁸ Human Rights Watch interview with Dr. Khalid Abu Samra, June 29, 2024.

II. Near Collapse of Gaza's Maternal Healthcare System

Since October 7, 2023, Gaza's healthcare system, including its maternal healthcare system, has nearly collapsed and its ability to provide care for some 50,000 pregnant women has been drastically diminished.²⁹

According to the World Health Organization, between October 7, 2023, and December 4, 2024, there were 591 attacks on healthcare facilities in Gaza that damaged 33 hospitals and killed 854 people and injured 1,262 others. Those harmed included healthcare workers, patients, and displaced Palestinians sheltering in and around hospitals.³⁰ In December 2023, Israel carried out an attack that destroyed Gaza's largest fertility clinic and with it, over 3,000 embryos.³¹

The Gaza Ministry of Health has reported that more than 1,054 health workers and medical professionals have been killed during the hostilities, including at least six pediatricians and five obstetrician-gynecologists, and that Israeli forces have detained more than 330 healthcare workers.³² Human Rights Watch has documented the torture and degrading treatment of detained Palestinian healthcare workers, including the deaths of two doctors

²⁹ "Reported impact snapshot | Gaza Strip (8 January 2025)", OCHA, January 8, 2025, https://www.ochaopt.org/content/reported-impact-snapshot-gaza-strip-8-january-2025 (accessed January 11, 2025); "oPt Emergency Situation Issue 52, 7 Oct 2023 – 4 Dec 2024", *WHO*, https://www.emro.who.int/images/stories/Sitrep_52.pdf (accessed January 11, 2025).

³⁰ oPt Emergency Situation Update Issue 52, 7 October 2023 – 4 Dec 2024, WHO, https://www.emro.who.int/images/stories/Sitrep_52.pdf (accessed January 11, 2025).

³¹ Saleh Salem, Imad Creidi and Andrew Mills, "Gaza's IVF embryos destroyed by Israeli strike," Reuters, April 17, 2024, https://www.reuters.com/world/middle-east/5000-lives-one-shell-gazas-ivf-embryos-destroyed-by-israeli-strike-2024-04-17/ (accessed October 31, 2024); Arwa Mahdawi, "An Israeli bomb destroyed 4,000 embryos at a Gaza IVF centre. Where is the outrage?," *Guardian*, April 20, 2024, https://www.theguardian.com/commentisfree/2024/apr/20/israel-destroyed-embryos-bombing-ivf-center-gaza (accessed October 31, 2024); "Report of the Independent International Commission of Inquiry on the Occupied Palestinian Territory, including East Jerusalem, and Israel," United Nations General Assembly, A/79/232, September 11, 2024, https://documents.un.org/doc/undoc/gen/n24/262/79/pdf/n2426279.pdf (accessed October 30, 2024).

³² Anjana Sankar, "Many of Gaza's Medical Workers Have Been Detained or Killed," *New York Times*, August 2, 2024, https://www.nytimes.com/2024/08/02/world/middleeast/gaza-doctors-medical-workers-israel.html#:~:text=Out%20of%20a%20prewar%20total,detention%2C%20Gaza's%20health%20ministry%20says. (accessed October 31, 2024); غزة غزة غزة (@MOHMediaGaza) post to Telegram channel, December 12, 2024, https://t.me/MOHMediaGaza/6135 (accessed January 11, 2025).

in detention.³³ In addition, at least 369 aid workers, including some working with medical organizations, have been killed.³⁴

As of January 2025, emergency obstetric and newborn care is only available at seven out of 18 partially functioning hospitals across Gaza, four out of 11 field hospitals, and one community health center, compared to a total of 20 hospitals and other smaller healthcare facilities that functioned before October 7, 2023.³⁵

Al-Sahaba Hospital in Gaza City was the only functioning dedicated maternity hospital in northern Gaza in late September 2024, with 20 maternity beds and 20 surgical beds, according to its medical and administrative director, Dr. Naem Ayoub.³⁶ He said between his hospital and Kamal Adwan, the only general hospital in the north with a neonatal intensive care unit and maternity and pediatrics department, they had a total of 16 working incubators left. According to UNICEF, there were 105 incubators in northern Gaza before the war.³⁷

More generally with regard to conditions in healthcare facilities, the number of people injured in the military attacks needing emergency or critical care remains high, which means those healthcare facilities that still operate have very limited capacity to treat non-urgent cases.³⁸

³³ "Israel: Palestinian Healthcare Workers Tortured, ICC Prosecutor Should Investigate Attacks on Health Care, Detainee Abuses," Human Rights Watch news release, August 26, 2024, https://www.hrw.org/news/2024/08/26/israel-palestinian-healthcare-workers-tortured.

³⁴ "Humanitarian Situation Update #253 | Gaza Strip," OCHA, https://www.ochaopt.org/content/humanitarian-situation-update-253-gaza-strip, January 8, 2025 (accessed January 11, 2025).

^{35 &}quot;Humanitarian Situation Update #255 | Gaza Strip," OCHA, January 14, 2025, https://www.ochaopt.org/content/humanitarian-situation-update-255-gaza-strip (accessed January 14, 2025); "oPt Emergency Situation Issue 52, 7 Oct 2023 – 4 Dec 2024", World Health Organization, https://www.emro.who.int/images/stories/Sitrep_52.pdf (accessed January 11, 2025); "Gaza: Unlawful Israeli Hospital Strikes Worsen Health Crisis, Israel's Blockade, Bombardment Decimate Healthcare System; Investigate as War Crimes," Human Rights Watch news release, November 14, 2023, https://www.hrw.org/news/2023/11/14/gaza-unlawful-israeli-hospital-strikes-worsen-health-crisis; oPt Emergency Situation Update, Issue 49, 7 Oct 2023 - 6 Nov 2024, WHO, https://www.emro.who.int/images/stories/Sitrep_49.pdf (accessed November 19, 2024).

³⁶ Human Rights Watch remote interview with Dr. Naem Ayoub, Doha, September 25, 2024.

^{37 &}quot;الكتمال حملة التطعيم ضد شلل الأطفال في غزة والوصول إلى 88 %من الأطفال المستهدفين في الشمال," *UN News*, November 6, 2024, https://news.un.org/ar/story/2024/11/1136376 (accessed December 5, 2024).

³⁸ See "With Nasser hospital out of commission, people in southern Gaza run out of healthcare options," MSF, January 26, 2024, (https://www.msf.org/nasser-hospital-out-commission-people-southern-gaza-run-out-healthcare-options (accessed October 30, 2024). Fatima Hassan, Shuaib Manjra, and Leslie London "Israel's unrelenting war on Gaza healthcare requires urgent action," *Al Jazeera*, February 14, 2024, https://www.aljazeera.com/opinions/2024/2/14/israels-unrelenting-war-ongaza-healthcare-requires-urgent-action (accessed October 30, 2024); "Broken healthcare and disease in Gaza could kill

The hostilities have also forced some healthcare workers to stop working to care for their own families, including a midwife and a pediatrician Human Rights Watch interviewed.

From March to April 2024, UN Women surveyed 305 women across Gaza's five governorates, or regions, including 37 pregnant women.³⁹ Among the pregnant women surveyed, 68 percent had experienced medical complications. Of these 68 percent, 92 percent reported urinary tract infections (UTIs), 76 percent anemia, 44 percent hypertensive disorders, and 28 percent preterm labor. Other concerns included bleeding (20 percent), hemorrhage (16 percent), and stillbirth (12 percent). Before the hostilities, the rates of such medical complications were considerably lower.⁴⁰

Quality of Care Degraded

Access to adequate health care is impeded by the chokehold on bringing goods into Gaza since October 7, which has led to critical shortages of fuel, which is used to generate the electricity required to operate medical facilities and equipment; of all medicine and supplements; and of all medical supplies, including materials for critical tests and replacement parts for medical and power-generating equipment.⁴¹ These issues are

https://www.unrwa.org/sites/default/files/content/resources/annual_report_2023_26_may_2023_good_resolution_5.3m_

compressed.pdf (accessed December 4, 2024).

more than conflict," British Red Cross, https://www.redcross.org.uk/stories/disasters-and-emergencies/world/plunging-temperatures-broken-healthcare-and-disease-in-gaza (accessed October 31, 2024).

³⁹ While not representative of all pregnant women, data from these interviews are indicative of severe maternal health challenges. "Gender Alert: Gaza: A War on Women's Health," UN Women, September 2024, https://arabstates.unwomen.org/sites/default/files/2024-09/en-gender-alerthealthsep_24.pdf (accessed January 8, 2025).

⁴⁰ Global prevalence of UTIs in pregnant women is 29 percent. Salari N, Khoshbakht Y, Hemmati M, Khodayari Y, Khaleghi AA, Jafari F, Shohaimi S, Mohammadi M, "Global prevalence of urinary tract infection in pregnant mothers: a systematic review and meta-analysis," PMID Public Health, November 22, 2023, https://pubmed.ncbi.nlm.nih.gov/37734277/ (accessed December 4, 2024). 2022 data from the West Bank found anemia rates between 27 and 30 percent; the rate of preterm labor was 6 percent in the West Bank in 2022; the rate of pregnant women experiencing bleeding was 1.8 percent in the West Bank in 2022; the rate of women who experienced stillbirths was 0.5 percent in Gaza in 2022; the rate of pregnant women experiencing hemorrhage was 3 percent in West Bank in 2022, "Annual Report 2022 The Israeli Aggression Against Palestinians in 2022," Palestinian Ministry of Health Emergency Operation Center, 2022, https://site.moh.ps/Content/Books/GIKYy552PXX22CWg3V4Y9xBoZeA4DCph2WQYwst1lc4rnbpPj7ZZVn_yc6X9qgxEEnl1zmY xveLqvpVVcg9gJoXEL1g7j99MbLzUGnnTsKjjk.pdf (accessed December 5, 2024). 2023 data from Gaza found 7.7 percent of pregnant women with hypertension, UNRWA, Department of Health, Annual Report 2023, May 2023, Figure 15,

^{41 &}quot;Pregnant women and mothers in Gaza are fighting to keep themselves and their babies alive amidst healthcare collapse, the IRC warns," International Rescue Committee, April 2, 2024, https://www.rescue.org/press-release/pregnant-women-and-mothers-gaza-are-fighting-keep-themselves-and-their-babies-alive (accessed October 30, 2024); "Israel: Unlawful Gaza Blockade Deadly for Children: Denial of Water, Fuel, Electricity Endangers Lives," Human Rights Watch news release, October 18, 2023, https://www.hrw.org/news/2023/10/18/israel-unlawful-gaza-blockade-deadly-children; Julian Borger, "Gaza hospitals ceasing to function as water and fuel run out," Guardian, October 24, 2023,

compounded by overcrowding of medical centers (see below). The World Health Organization shared with Human Rights Watch an assessment of needs that identified 19 types of medical equipment and 24 types of medication needed for prenatal, delivery and postnatal care that were in short supply and urgently needed as of December 2024.⁴²

Dr. Naela Masri at Nasser Hospital in Khan Younis said in late September:

To be honest, all capabilities to provide maternity services are weak. Most equipment, like ultrasound machines, and tools to equip surgical rooms are lacking. Women give birth without any privacy. There are no blankets to cover them. ... Sanitary and disinfecting materials don't exist, like chlorine and hand soap, which haven't been available for long periods.

Dr. Adnan Radi, an obstetrician-gynecologist in northern Gaza, said in late September that his hospital was short of all medications, including epidurals, most anesthetic drugs, surfactant to help the breathing of preterm babies who have underdeveloped lungs, and birth control, which is a vital component of reproductive health. The hospital was also short of replacement parts for medical equipment.⁴³

In a letter to the administration of US President Joe Biden in October 2024, US healthcare workers who had volunteered in Gaza said they had witnessed women undergoing vaginal deliveries and even Cesarean sections without anesthesia and that these women had been given nothing but Tylenol afterwards, because no other pain medications were available.⁴⁴

https://www.theguardian.com/world/2023/oct/24/gaza-hospitals-ceasing-to-function-as-water-and-fuel-run-out (accessed October 30, 2024); Abeer Salman, Tim Lister, Mohammed Al Sawalhi and Mohammed Tawfeeq, "Infected wounds, maggots and no escape. Gaza's humanitarian crisis hits new lows as sanitary conditions plummet," CNN, September 9, 2024, https://www.cnn.com/2024/09/09/middleeast/gaza-humanitarian-crisis-sanitation-mime-intl/index.html (accessed October 30, 2024); "Gaza: Unlawful Israeli Hospital Strikes Worsen Health Crisis: Israel's Blockade, Bombardment Decimate Healthcare System; Investigate as War Crimes," Human Rights Watch news release, November 14, 2023, https://www.hrw.org/news/2023/11/14/gaza-unlawful-israeli-hospital-strikes-worsen-health-crisis.

⁴² Human Rights Watch email exchange with World Health Organization representatives, December 2024.

⁴³ Ng E.H., Shah V., "Guidelines for surfactant replacement therapy in neonates," Pediatric Child Health. 2021 Feb 1;26(1):35-49, accessed January 15, 2025, doi: 10.1093/pch/pxaa116. PMID: 33552321; PMCID: PMC7850281. https://pmc.ncbi.nlm.nih.gov/articles/PMC7850281/.

^{44 &}quot;Letter to President Biden and Vice President Harris, Open Letter from American Medical Professionals Who Served In Gaza," Gaza Healthcare Letters, October 2, 2024, https://www.gazahealthcareletters.org/usa-letter-oct-2-2024 (accessed November 7, 2024).

Heba al-Nashef, a 37-year-old midwife who was part of a UN delegation to Gaza in June, told *Marie Claire* magazine that al-`Awda, a hospital in northern Gaza, "didn't have the right sutures for women sometimes, or enough CPAP [continuous positive airway pressure] machines for respiratory support, or safe umbilical cord clamps for the babies. Some midwives were using the lace of a mask, soaked in alcohol, to wrap around the umbilical cord to stop it from bleeding." This practice is safe only in sanitized conditions. Al-Nashef said that once a baby was born, there were no sheets to absorb the amniotic fluid or dry the baby, so medical staff used diapers instead.

Dr. Nawal al-Solih, a 58-year-old pediatrician, said that after an attack in November 2023 killed one of her children and injured two others, she accompanied her son to Shuhada al-Aqsa Hospital for treatment. 46 While there, she provided medical assistance to the hospital and said she saw how it had very little functioning medical equipment and no way to sterilize instruments and wounds.

The United Nations Population Fund (UNFPA) representative said she had observed poor sterilization systems, including sterilizing medical instruments with alcohol and fire.⁴⁷

Ayah Abu Khatir, a 29-year-old midwife, said that early in the war, her medical team at an UNRWA camp in Nuseirat ran out of iron and folic acid supplements, which are recommended during pregnancy. Khatir also described the lack of medication to treat urinary tract infections, which a number of pregnant women interviewed had experienced and which can lead to serious health complications for pregnant people if inadequately treated. 48 Frequent power cuts delayed ultrasounds, and blood and urine tests were not carried out, since there was no electricity to power the testing equipment. Abu Khatir said all the team could do was check women's weight, heart rate, and blood pressure.

Preexisting medical conditions or conditions that can be brought on or worsened by pregnancy, including hypertension, diabetes, epilepsy, anemia, and cardiovascular diseases, can lead to serious health complications for pregnant and recently pregnant

⁴⁵ Elizabeth Flock, "Giving Birth in Gaza," Marie Claire, 2024 Issue, https://www.marieclaire.com/politics/gaza-maternal-health-crisis/ (accessed November 7, 2024).

⁴⁶ Human Rights Watch interview with Dr. Nawal al-Solih, Doha, June 30, 2024.

⁴⁷ Human Rights Watch interview with Nadine Cornier, Head of Programme Support Unit, UNFPA, Doha, August 12,2024.

⁴⁸ Human Rights Watch interview with Ayah Abu Khatir, midwife, Doha, June 30, 2024.

women. Some acute health conditions that occur during or after pregnancy can be fatal if not adequately treated, including infections and sepsis, hemorrhaging, eclampsia, and preterm labor.⁴⁹ Anemia also heightens the risk of preterm birth and anemia in infants, which can lead to developmental disabilities.

Dr. Radi said his private hospital, al-`Awda, was unable to offer any prenatal care services, which are essential for preventing and treating these conditions by identifying high-risk pregnancies, making early diagnoses, and providing appropriate care.

Overcrowded Conditions

Israa Mazen Diab al-Ghul, 30, who was pregnant when the war broke out, described how her pregnant sister-in-law, Hiyam al-Mashi, had to take a horse and cart to get to the hospital when she went into labor in February. 50 An hour after giving birth, hospital staff asked her to leave, so other patients could be accommodated. She and her newborn returned to a room with 25 other people in a house in Nuseirat where her family was sheltering. 51

The overcrowded conditions in healthcare facilities that continue to function in Gaza contribute significantly to the worsening quality of medical care for all patients, including pregnant women and newborns. ⁵² In February, Samira Hosny Qeshta, a midwife working at al-Helal al-Emirati maternity hospital in Rafah, an area that has since been depopulated following Israeli military evacuation orders, said there were only five beds for deliveries: "It was exhausting; we handled 78 cases in one night." ⁵³ As the last hospital providing

⁴⁹ "Living conditions threaten the lives of pregnant women and newborns in Gaza," MSF, July 18, 2024, https://www.msf.org/living-conditions-are-threatening-lives-pregnant-women-gaza (accessed October 30, 2024).

⁵⁰ Human Rights Watch interview with Israa Mazen al-Ghul, Doha, June 29, 2024.

⁵¹ Ibid.

⁵² Alice Cuddy, "Gaza doctors: 'We leave patients to scream for hours and hours," BBC, February 18, 2024, https://www.bbc.com/news/world-middle-east-68331988 (accessed October 30, 2024); "Largest hospital in central Gaza faces imminent shutdown due to lack of fuel," AP News, May 23, 2024, https://apnews.com/article/israel-iran-hamas-latest-05-23-2024-cb1c2aa5ed9cd5942c036dd94c7e43e6 (accessed October 30, 2024); Rondi Anderson, "A Nightmare for Pregnant Women in Gaza," *Think Global Health*, August 7, 2024, https://www.thinkglobalhealth.org/article/nightmare-pregnant-women-gaza (accessed October 30, 2024).

⁵³ "Impossible choices in Gaza: "Women are giving birth prematurely because of terror," UNFPA, February 23, 2024, https://www.unfpa.org/news/impossible-choices-gaza-%E2%80%9Cwomen-are-giving-birth-prematurely-because-terror%E2%80%9D (accessed October 29, 2024).

maternity care in Khan Younis, al-Nasser hospital and its medical team were handling between 25 and 30 deliveries a day, MSF said in July 2024.⁵⁴

Patients are rushed out of the hospital soon after treatment to make space for others. Dr. Ayoub of al-Sahaba Maternity Hospital said that because of overcrowding, the hospital was discharging women within four hours of delivering their babies, except for those who underwent Cesarean sections. They were scheduled for surgery in the morning and had to leave that same evening.⁵⁵

Samira Hosny Qeshta, a midwife who worked at al-Helal al-Emirati maternity hospital in Rafah, described the impacts of overcrowding to UNFPA: "While one woman is giving birth, we bring another case, and there's no bed. We say, 'Get up, sit on a chair,' and she just gave birth. There's no hygiene, there's no privacy. ... It's miserable." 56

Heba al-Nashef, a 37-year-old midwife, told *Marie Claire* in June that in al-`Awda Hospital, it was "35 degrees [Celsius], with a hot sewage smell, and no clean running water." 57 She said that women were only brought to the delivery room downstairs "when a woman pushes and you see the head."

Discharging mothers and their newborns so quickly after childbirth means they cannot be monitored for potentially life-threatening health issues. "The first 24 hours postpartum are the riskiest for complications, and with people living in dire conditions, it's important to keep the patient in the hospital as long as possible," said Rita Botelho da Costa, MSF's midwife activity manager. 58

⁵⁴ "Living conditions threaten the lives of pregnant women and newborns in Gaza," MSF, July 18, 2024, https://www.msf.org/living-conditions-are-threatening-lives-pregnant-women-gaza (accessed October 29, 2024).

⁵⁵ Human Rights Watch remote interview with Dr. Naem Ayoub, Doha, September 25, 2024.

⁵⁶ "Impossible choices in Gaza: 'Women are giving birth prematurely because of terror,'" UNFPA, February 23, 2024, https://www.unfpa.org/news/impossible-choices-gaza-%E2%80%9Cwomen-are-giving-birth-prematurely-because-terror%E2%80%9D (accessed October 30, 2024).

⁵⁷ Elizabeth Flock, "Giving Birth in Gaza," *Marie Claire*, https://www.marieclaire.com/politics/gaza-maternal-health-crisis/(accessed October 30, 2024).

⁵⁸ "Displaced pregnant women at high risk amid dire conditions in Rafah," MSF, January 29, 2024, https://www.msf.org/gaza-displaced-pregnant-women-high-risk-amid-dire-conditions-rafah (accessed October 30, 2024).

Dr. Radi said at least one mother had died soon after delivery because of sepsis and a lack of antibiotics in late September.⁵⁹

Not all women are able to make it to a hospital in time for their delivery because of the hostilities. 60 Dr. Nawal al-Solih, a pediatrician, said while was providing medical support at Shuhada al-Aqsa Hospital in early November 2023, some women came to the hospital after they had already given birth because they had faced significant challenges in coming to the hospital, leading to delivery risks. 61

Project HOPE, an international global health and humanitarian aid non-governmental organization, shared the testimony of Shaima, a midwife working at al-Sahaba Hospital in northern Gaza from November 2024:

The reality for pregnant women in northern Gaza is grim. We are seeing both women and newborn babies die from preventable causes. Almost every day I see a woman with postpartum hemorrhage, the leading cause of death for pregnant women. Most of these women gave birth at home or in a tent and were rushed to the hospital due to bleeding. This week, a woman came into the hospital with a baby stuck in her birth canal. The baby's head was out for half an hour. The baby later died. Pregnant women are frequently malnourished here and have no access to prenatal vitamins or proper nutrition. We will continue to see more people die unless there is better healthcare access. 62

Access to Medical Care

All the pregnant women and healthcare workers Human Rights Watch interviewed said the scale of fighting meant that civilians in areas under attack have been unable to safely travel within the Gaza Strip, including to healthcare providers. The unsafe routes women

⁵⁹ Human Rights Watch interview with Dr. Adnan Radi, Doha, September 23, 2024.

⁶⁰ Zena Chamas, "Pregnant mothers in Gaza reportedly facing cesareans without anesthetic, emergency hysterectomies and death," *ABC News*, December 28, 2023, https://www.abc.net.au/news/2023-12-29/being-pregnant-in-gaza-unsafe-women-paying-heaviest-price-in-war/103241724 (accessed November 15, 2024).

⁶¹ Human Rights Watch interview with Dr. Nawal al-Solih, Doha, June 30, 2024.

⁶² Human Rights Watch email exchange with Rondi Anderson, Senior Technical Advisor for Reproductive, Maternal, Newborn, and Child Health, Project HOPE, December 10, 2024.

have had to navigate amid the fighting and without safe transportation have often been delaying access to health care and put them at higher risk of complications, MSF said.⁶³

In addition, Israeli authorities have imposed severe movement restrictions, preventing many civilians from moving between different areas of Gaza in vehicles and forcing them to instead travel by foot, often over long distances. They have had to navigate restrictions on where they can go and wait for long periods at Israeli checkpoints. ⁶⁴ Randa Zakout, 24, was seven-months pregnant when Israeli forces told civilians to evacuate south. She had to walk for six hours to reach Rafah. ⁶⁵

Ridana Zukhra was at Shifa Hospital in early November when Israeli forces surrounded it and told people inside to leave. She was six months pregnant at the time. Zukhra, her brother, who had a wound on his hand from a large strike on a building, and her 3- and 5-year-old children left, carrying white flags. She said a tank then fired at them, severely wounding the left leg of her 5-year-old daughter, Ghazal. Zukhra, her brother, her children, her cousin, and a doctor who was behind them, ran into a nearby building where they stayed for five days for fear of being targeted again. During those five days, Ghazal's wound started to smell and developed gangrene. The doctor treated Ghazal without any medication or bandages, amputating her left leg without anesthetic and sealing the wound with a heated knife.⁶⁶

The family had almost no food or water. Zukhra's cousin was also pregnant at the time. Eventually they fled south, waiting for four hours at an Israeli-manned checkpoint before getting to Nasser hospital, where doctors said Ghazal had blood poisoning and that her leg needed to be amputated even higher. Ghazal eventually was medically evacuated with Zukhra, but Zukhra's husband, brother and son—all of whom had recently contracted hepatitis A—were denied permission to evacuate with them.⁶⁷

"FIVE BABIES IN ONE INCUBATOR"

⁶³ "Living conditions threaten the lives of pregnant women and newborns in Gaza," MSF, July 18, 2024, https://www.msf.org/living-conditions-are-threatening-lives-pregnant-women-gaza (accessed October 29, 2024).

⁶⁴ Oqab Jabali, Abed Alkarim Ayyoub, Shaden Jabali, "Navigating health challenges: the interplay between occupation-imposed movement restrictions, healthcare access, and community resilience," *BMC Public Health*, May 13, 2024, https://pmc.ncbi.nlm.nih.gov/articles/PMC11089674/ (accessed October 29, 2024).

⁶⁵ Human Rights Watch interview with Randa Zakout, Doha, June 25, 2024.

⁶⁶ Human Rights Watch interview with Ridana Zukhra, Doha, June 28, 2024.

⁶⁷ Ibid.

III. Impact of Poor Nutrition, Water and Sanitation

Adequate prenatal health care for pregnant women includes access to a diet that provides the right nutrients to support pregnancy and health, clean water for drinking and sanitation, and medical services, including checkups and prenatal tests. Because of the hostilities in Gaza, pregnant women have been unable to access these essential elements of prenatal health care.

In its report based on interviews with 305 women from Gaza from March to April 2024, UN Women found that 99 percent of survey respondents who had recently been pregnant or had pregnant women in their households experienced challenges related to nutrition and 78 percent said they had no access to tests to assess their nutritional and health status. 68 All the pregnant women that Human Rights Watch interviewed said the lack of prenatal care had had specific effects on them.

Nutrition

Maintaining good nutrition and a healthy diet during pregnancy is critical for the health of the pregnant person and fetus. 69 But this has been nearly impossible in Gaza since the beginning of the hostilities.

Five months into the hostilities, in February, the Global Nutrition Cluster, a UN-led mechanism to support humanitarian emergencies including in Gaza, reported a steep rise in malnutrition among children and pregnant and breastfeeding women in the Gaza Strip, as food and safe water became increasingly scarce, and diseases proliferated.70

⁶⁸ Gender Alert: Gaza: A War on Women's Health, UN Women, September 2024, https://arabstates.unwomen.org/sites/default/files/2024-09/en-gender-alerthealthsep_24.pdf (accessed October 30, 2024).

⁶⁹ "Nutrition counselling during pregnancy," WHO, August 9, 2023, https://www.who.int/tools/elena/interventions/nutrition-counselling-pregnancy (accessed October 30, 2024).

⁷⁰ "Children's lives threatened by rising malnutrition in the Gaza Strip," UNICEF, February 9, 2024, https://www.unicef.org/mena/press-releases/childrens-lives-threatened-rising-malnutrition-gaza-strip (accessed October 30, 2024).

As of October 17, 2024, nearly 133,000 people faced catastrophic or famine-levels of food insecurity and 664,000 faced emergency levels of shortages, according to the Integrated Food Security Phase Classification (IPC).⁷¹

There were about 50,000 pregnant women in Gaza as of December 2024, the WHO said, with at least 180 women giving birth daily.⁷² The IPC reported an estimated 16,500 cases of pregnant and breastfeeding women who would need treatment for acute malnutrition in October 2024.⁷³ The United Nations Population Fund (UNFPA) reported that at the end of December 2024, over 48,000 pregnant women were experiencing emergency and catastrophic food insecurity.⁷⁴

A pregnant person's nutritional health significantly influences the development of the fetus as well as the long-term growth and wellness of the child.⁷⁵

The lack of access to adequate nutrition in Gaza is having a severe effect on young children. The Global Nutrition Cluster reported in February 2024 that 1 in 6 children under the age of 2, or 16 percent, who were screened at shelters and health centers in northern Gaza in January 2024 were found to be acutely malnourished. Of these, nearly 3 percent suffered from severe wasting, the most life-threatening form of malnutrition. The IPC

^{71&}quot; Understanding the IPC Scales, Intergraded Food Security Phase Classification," IPC, https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/communication_tools/brochures/IPC_Brochure_Understanding_the_IPC_Scales.pdf (accessed November 20, 2024).

^{72 &}quot;oPt Emergency Situation Issue 52, 7 Oct 2023 – 4 Dec 2024", *WHO*, https://www.emro.who.int/images/stories/Sitrep_52.pdf (accessed January 11, 2025).

^{73 &}quot;Gaza Strip: IPC Acute Food Insecurity and Acute Malnutrition Special Snapshot," IPC, October 17, 2024, https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Gaza_Strip_Acute_Food_Insecurity_Malnutrition_Sep20 24_Apr2025_Special_Snapshot.pdf (accessed November 20, 2024); "Understanding the IPC Scales, Intergraded Food Security Phase Classification," IPC,

https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/communication_tools/brochures/IPC_Brochure_Understanding_the_IPC_Scales.pdf (accessed November 20, 2024).

^{74 &}quot;Situation Report: Humanitarian Crisis in Palestine," United Nations Population Fund, January 6, 2025, https://www.unfpa.org/sites/default/files/resource-pdf/Situation%20Report%20%23%2013%20-%20December%202024%20-%20Palestine.pdf (accessed January 14, 2025).

^{75 &}quot;The developing fetus relies entirely on the mother's diet for essential nutrients, vitamins, and minerals vital for development. A balanced and nutrient-rich diet ensures the optimal growth of the baby's organs, brain, and immune system." Afsana Naaz, Komal N Muneshwa, "How Maternal Nutritional and Mental Health Affects Child Health During Pregnancy: A Narrative Review," *Cureus*, 15(11), November 13, 2023, https://doi.org/10.7759/cureus.48763 (accessed December 2, 2024).

⁷⁶ "Children's lives threatened by rising malnutrition in the Gaza Strip," UNICEF, February 19, 2024, https://www.unicef.org/mena/press-releases/childrens-lives-threatened-rising-malnutrition-gaza-strip (accessed October 30, 2024).

reported an estimated 60,000 cases of acute malnutrition among children between the ages of 6 and 59 months as of October 2024.77 Prior to October 7, just 0.8 percent of children under 5 in Gaza were acutely malnourished. Malnutrition can have serious physical and cognitive impacts among children, which can lead to a disability.78

Water and Sanitation

Israa Mazen Diab al-Ghul, 30, said accessing clean water was her biggest challenge when she was pregnant between October 2023 and April 2024.⁷⁹ She said her husband spent hours each day trying to find clean water, but sometimes failed. She said that for 48 hours in early 2024, the family had to drink sea water: "I vomited, and I was worried it would kill the baby. I was praying that the war would end before I gave birth. Then I started begging that God would take the baby, so I wouldn't need to give birth during this war."

Insufficient and inadequate water and sanitation can have particularly dangerous effects for vulnerable groups, including pregnant women and young children, including from the spread of water-borne diseases, viruses, and infections from unsanitary facilities like toilets. 80 The pregnant women interviewed all spoke about their challenges in getting access to water both for drinking and for sanitation purposes. 81

^{77 &}quot;Gaza Strip: IPC Acute Food Insecurity and Acute Malnutrition Special Snapshot," IPC, October 17, 2024, https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Gaza_Strip_Acute_Food_Insecurity_Malnutrition_Sep20 24_Apr2025_Special_Snapshot.pdf (accessed November 20, 2024); "Understanding the IPC Scales, Intergraded Food Security Phase Classification," IPC,

https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/communication_tools/brochures/IPC_Brochure_Understanding_the_IPC_Scales.pdf (accessed November 20, 2024).

⁷⁸ Maeve Hume-Nixon, Hannah Kuper, "The association between malnutrition and childhood disability in low- and middle-income countries: systematic review and meta-analysis of observational studies,"

https://onlinelibrary.wiley.com/doi/full/10.1111/tmi.13139#:~:text=Malnutrition%2omay%2oalso%2olead%2oto,public%2 ohealth%2osystems%2oare%2oweakest; Pelizzo G, Calcaterra V, Acierno C and Cena H (2019) Malnutrition and Associated Risk Factors Among Disabled Children. Special Considerations in the Pediatric Surgical "Fragile" Patients. *Front. Pediatr.*, 7:86. Doi: 10.3389/fped.2019.00086, https://www.frontiersin.org/articles/10.3389/fped.2019.00086/full#B4; Magdalena Engl, Paul Binnis, Indi Trehab, Natasha Lelijveld, Chloe Angood, Marie McGrath, Nora Groce, Marko Kerac, "Children Living with Disabilities are Absent From Severe Malnutrition Guidelines," Archives of Disease in Childhood (2022):107, https://doi.org/10.1136/archdischild-2021-323303.

⁷⁹ Human Rights Watch interview with Israa Mazen al-Ghul, Doha, June 29, 2024.

⁸⁰ "Impossible choices in Gaza: 'Women are giving birth prematurely because of terror,'" UNFPA, February 23, 2024, https://www.unfpa.org/news/impossible-choices-gaza-%E2%80%9Cwomen-are-giving-birth-prematurely-because-terror%E2%80%9D (accessed October 30, 2024).

⁸¹ Chris Brown and Mohamed El Saife, "Women in Gaza Giving Birth Without Enough Painkillers, Clean Water or Food," CBC, March 15, 2024, https://www.cbc.ca/news/world/women-gaza-birth-pregnancies-1.7143489 (accessed October 30, 2024).

Dr. Naela Masri in Khan Younis said many pregnant patients of hers had contracted hepatitis A due to poor sanitation. 82 She said they showed symptoms including severe vomiting, which she suspected in some cases had led to miscarriage.

Samira Hosny Qeshta, the midwife at al-Helal al-Emirati maternity hospital in Rafah, told UNFPA: "Most of the women come with infections. The bathrooms are shared, and infections are easily transmitted. They can't even change their underwear, and all of this contributes to infections." One pregnant woman told a Canadian media outlet that she had caught infections from unsanitary toilets in the area to which she had fled.

Like hundreds of thousands of civilians in Gaza, Shaima Suhail Abu Jazar fled her house to seek shelter in a safer location after October 7.85 She spent 120 days while pregnant sheltering in a school in Tal al-Sultan refugee camp. During that time, she said she lived in a classroom with at least 50 other people, in a school that was housing thousands, with only one bathroom for everyone in the school. During those 120 days, she could never wash herself. She said that every four or five days, a vehicle with a tank of non-potable water would come to the school and people would buy any water left in the tank. Shaima said this was often the only water they had to drink, leading many, including her, to suffer from diarrhea and vomiting.

Ridana Zukhra, 25, said on most days during the war in Gaza while she was pregnant, she did not have access to water to wash herself or even her hands. 86 She spent about a month at Shifa Hospital as a caregiver to her injured mother who was a patient there. She said the limited water at the hospital was restricted for medical purposes and for the medical workers and patients to use. She said she often spent two or more hours a day walking to try to find water.

⁸² Hepatitis A is an inflammation of the liver caused by ingesting food or water that is contaminated with the feces of an infected person. Human Rights Watch remote interview with Dr. Masri, head of nursing and primary care, Nasser Hospital in Khan Younis, Sept 24, 2024.

⁸³ "Impossible Choices in Gaza: 'Women Are Giving Birth Prematurely Because Of Terror,'" UNFPA, February 23, 2024, https://www.unfpa.org/news/impossible-choices-gaza-%E2%80%9Cwomen-are-giving-birth-prematurely-because-terror%E2%80%9D (accessed October 29, 2024).

⁸⁴ Chris Brown and Mohamed El Saife, "Women in Gaza Giving Birth Without Enough Painkillers, Clean Water or Food," CBC, March 15, 2024, https://www.cbc.ca/news/world/women-gaza-birth-pregnancies-1.7143489 (accessed October 30, 2024).

⁸⁵ Human Rights Watch interview with Shaima Suhail Abu Jazar, Doha, June 28, 2024.

⁸⁶ Human Rights Watch interview with Ridana Sabaa Rajab Zukhra, Doha, June 28, 2024.

IV. Healthcare Issues

Since the beginning of hostilities on October 7, 2023, pregnant women and girls and those who have recently given birth in Gaza have been faced with a range of healthcare issues that are challenging to address even when not under wartime conditions. These include miscarriage, preterm birth and low birthweight, poor postnatal care and follow-up, inadequate nutrition for babies, and heightened psychological impacts.

Miscarriage

Miscarriages are not uncommon under normal conditions, but the risk of miscarriage is significantly higher among those exposed to physical trauma and psychological stress.⁸⁷ Israeli military attacks have caused grave physical injuries to pregnant women and extreme stress, as pregnant women and girls have lived under constant fear of attack while grappling with displacement, material deprivation, and the trauma of having lost loved ones.⁸⁸ In July, maternal health experts reported that the rate of miscarriage in Gaza had increased by up to 300 percent since October 7, 2023.⁸⁹

Human Rights Watch spoke to two women who sustained injuries during Israeli attacks and subsequently experienced miscarriage and stillbirth, which they attributed to their injuries. Shahad al-Qutaiti, 23, was seven-months pregnant when the war began. She was at home when a munition hit her apartment building in Gaza City without warning on October 11.90 She said:

Suddenly something strong hit me. Everything became black and I felt like I was flying. I was catapulted. Then I stopped moving, and I saw the sky and the street and rubble everywhere. I was lying in the middle of the street. I

⁸⁷ Fan Qu et al., "The association between psychological stress and miscarriage: A systematic review and meta-analysis," *Scientific Reports* 7 (2017): 1731, accessed January 11, 2025, doi: 10.1038/s41598-017-01792-3.

⁸⁸ Neil J. Murphy and Jeffrey D. Quinlan, "Trauma in Pregnancy: Assessment, Management, and Prevention," *American Family Physician* 90 (2014):10, accessed January 11, 2025, https://www.aafp.org/pubs/afp/issues/2014/1115/p717.html.

⁸⁹ "Press Release: Gaza nine months on, pregnant women carry the burden of conflict," International Planned Parenthood Federation, July 9, 2024, https://www.ippf.org/media-center/press-release-gaza-nine-months-pregnant-women-carry-burden-conflict (accessed October 30, 2024).

⁹⁰ Human Rights Watch interview with Shahad Omar al-Qutaiti, Doha, June 26, 2024.

screamed [to my husband Ali], 'Where are you?' He heard me and shouted, 'Shahad!'

And I saw that I had no left leg, and I saw that my husband had lost both legs and his left arm. We looked at each other. He was alive at that moment. He looked at his arm, and asked, 'Where is my hand, where is my hand?' I didn't answer, I didn't think I could speak. We looked at each other, then the ambulance came, and they took us to Shifa Hospital, and that was our last farewell. I never saw him again. Those were the hardest days of my life.

Shahad miscarried immediately after the attack. She also suffered multiple fractures and burns to her right leg, and her left arm had a deep wound exposing her bone. Her arm had to be operated on several times, but the hospital treating her was unable to provide her with any painkillers because of blockade-induced medicine shortages.

Shaima Suhail Abu Jazar, 33, was nine months pregnant when her apartment building in Rafah was hit by an explosive munition without warning at about 2 a.m. on February 12, 2024.91 The attack killed her husband, 16-year-old son, and 11-year-old daughter. Abu Jazar was severely injured in the attack, sustaining significant burns and fractures to her legs, feet, and belly. Her father brought her to the nearby Najar Hospital, but there was no room to treat her. After she had been kept waiting in a tent outside for three hours, her father took her to the European Hospital, where she waited for another three hours before going into surgery. Abu Jazar said she felt the fetus moving around for two days after the attack, but on the morning of the third day, felt no more movement. "I had been begging the doctors to do a Cesarean to get my baby out," she said. "But because of my state and loss of blood, they said no. Then the baby stopped moving. They made me give birth naturally." She had a stillbirth.

Dr. Ayoub of al-Sahaba Maternity Hospital said his hospital had not been collecting statistics, but his teams were seeing miscarriages and stillbirths at a far greater rate than they had seen before the war. 92 In late September, he said the body of a woman who was

⁹¹ Human Rights Watch interview with Shaima Suhail Abu Jazar, Doha, June 28, 2024.

⁹² Human Rights Watch remote interview with Dr. Naem Ayoub, Doha, September 25, 2024.

nine months pregnant had been brought in, in order for doctors to try to save the fetus, but that by the time they had carried out the Cesarean section, the fetus had died because the mother had been dead for over two hours at that point.

Preterm Birth and Low Birthweight

Human Rights Watch could find no statistics on the number of preterm and stillbirths during and prior to the hostilities and none of the women interviewed experienced a preterm birth, but all healthcare providers interviewed said that, anecdotally, cases seem to have increased.93 Preterm births and low birthweight are common indicators of severe malnourishment and can be compounded by stress, fear, and exhaustion, all factors linked to the hostilities.94

Maternal stress is a well-established risk factor for preterm birth.95 Additionally, stress can negatively impact the immune system, increasing susceptibility to infections that can also lead to preterm birth.96 Stress, anxiety, and depression experienced by women during pregnancy can also harm the fetus and increase the risk of cognitive, behavioral, and emotional impacts on children.97

Randa Zakout, 24, was seven months pregnant when Israeli forces ordered civilians in northern Gaza to evacuate to the South. She said she had to walk for six hours to reach

⁹³ Human Rights Watch interview with Ayah Abu Khatir, Doha, June 30, 2024; Human Rights Watch interview with Dr. Nawal al-Solih, Doha, June 30, 2024.

^{94 &}quot;Humanitarian Situation Update #191 | Gaza Strip", OCHA, July 15, 2024, https://www.ochaopt.org/content/humanitarian-situation-update-191-gaza-strip (accessed October 29, 2024); "Pregnant women and mothers in Gaza are fighting to keep themselves and their babies alive amidst healthcare collapse, the IRC warns," IRC, Press Release, April 2, 2024, https://www.rescue.org/press-release/pregnant-women-and-mothers-gaza-are-fighting-keep-themselves-and-their-babies-alive (accessed October 29, 2024); "Impossible Choices in Gaza: 'Women Are Giving Birth Prematurely Because Of Terror,'" UNFPA, February 23, 2024, https://www.unfpa.org/news/impossible-choices-gaza-%E2%80%9Cwomen-are-giving-birth-prematurely-because-terror%E2%80%9D (accessed October 29, 2024).

⁹⁵ For example, the World Health Organization has noted that "[s]tress from any cause is also known to increase a woman's risk of having preterm birth." WHO, https://www.who.int/news-room/questions-and-answers/item/newborn-health-preterm-babies, (accessed December 3, 2024.)

⁹⁶ "Maternal stress is a well-established risk factor for preterm birth and has been associated with adverse neonatal outcomes in the first and subsequent generations, including increased susceptibility to disease and lasting immunological changes." Valeria Garcia-Flores et al., "Prenatal Maternal Stress Causes Preterm Birth and Affects Neonatal Adaptive Immunity in Mice," Frontiers in Immunology 11 (2020), accessed October 29, 2024, https://doi.org/10.3389/fimmu.2020.00254.

⁹⁷ Afsana Naaz and Komal N Muneshwar, "How Maternal Nutritional and Mental Health Affects Child Health During Pregnancy: A Narrative Review," *Cureus* 15(11): e48763, accessed November 14, 2024, doi: 10.7759/cureus.48763.

Rafah.98 She gave birth to her daughter, Warda, shortly after arriving in Doha, Qatar, where she and her son had been evacuated because of injuries sustained after a strike on their home.99 Warda's birthweight was lower than average, and Zakout said she and Warda both had iron and calcium deficiencies.

Dr. Naela Masri, head of Nursing and Primary Care at Nasser Hospital in Khan Younis, said in September that many of the babies her hospital was delivering were underweight: "Many babies are born extremely thin, with low weight. ... [We have so many of these] 'small for date' [babies] nowadays. We used to sometimes see babies born weighing over four kilograms [over average birth weight]. Now, after the war started, we don't see these cases at all."

Dr. Ayoub of al-Sahaba Maternity Hospital said that while the hospital had no capacity to collect current statistics, he estimated that of every 10 babies they were delivering in late September, four were preterm, a rate far higher than before the hostilities.

Some babies born preterm need to spend time in a neonatal intensive care unit and in incubators to survive and develop.

Dr. Ahmed Al Shaer at al-Helal al-Emirati maternity hospital in Rafah said they had so few incubators and so many preterm babies that, "we have to put four or five babies in one incubator. ... Most of them don't survive." 100 Medical experts warned that the risk of infections spreading when babies share incubators is high, especially when, as is the case in Gaza, hospitals cannot adequately clean and sterilize the incubators. 101 Dr. Ayoub of al-Sahaba hospital said they had no choice but to continue putting two and sometimes more babies in the same incubator: "We know we are taking the risk of killing them both, but at the same time, if we don't put them in the incubator together, they will both die." 102

⁹⁸ Human Rights Watch interview with Randa Zakout, Doha, June 25, 2024.

⁹⁹ Human Rights Watch interview with Randa Zakout, Doha, June 25, 2024.

¹⁰⁰ "Impossible Choices in Gaza: 'Women Are Giving Birth Prematurely Because Of Terror,'" UNFPA, February 23, 2024, https://www.unfpa.org/news/impossible-choices-gaza-%E2%80%9Cwomen-are-giving-birth-prematurely-because-terror%E2%80%9D (accessed October 29, 2024).

¹⁰¹ Human Rights Watch interview with Ayah Abu Khatir, Doha, June 30, 2024; Human Rights Watch interview with Dr. Nawal al-Solih, Doha, June 30, 2024.

¹⁰² Human Rights Watch remote interview with Dr. Naem Ayoub, Doha, September 25, 2024.

In September, Dr. Adnan Radi said al-`Awda Hospital had carried out 200 deliveries over the previous month, 50 of them Cesarean sections. He said the hospital did not have a single bed or incubator available for neonatal care despite the high number of preterm births, nor any beds available in the intensive care unit for mothers requiring critical care. Dr. Radi said this was leading to deaths:

Most of the babies we are delivering with severe low birthweight are dying of perinatal asphyxia in front of us and we can't do anything. We try to intubate the babies. Sometimes it has helped, but the picture is very gloomy. ... We have not been collecting statistics but in the last month I can remember more than six babies with low birthweight dying in front of me.

Dr. Khalid Abu Samra, an internal medicine specialist, was at Shifa Hospital both when Israeli forces surrounded and occupied it starting on November 17, 2023, and on November 19, when UNRWA staff evacuated 31 preterm babies. He said five babies had died in the previous days because of electricity cuts and fuel and milk shortages. 103

Preterm babies are at higher risk of health complications and developmental disabilities, especially when not supported by adequate health care and early intervention programs, which are currently virtually impossible to administer or access in Gaza.¹⁰⁴

Poor Postnatal Care and Follow-up

When women and newborns are discharged immediately after delivery from overcrowded hospitals, or stuck at home due to insecurity and fear, or forcibly displaced, they cannot access adequate post-birth health care, including follow-up checks and counseling on how to care for newborns. In April, MSF said that although it was providing postnatal care at three primary healthcare centers, it was nearly impossible to support mothers and follow

¹⁰³ Human Rights Watch interview with Dr. Khalid Abu Samra, Doha, June 29, 2024. "On 19 November, 31 out of the 36 premature babies, along with 16 staff and family members, were evacuated from Shifa Hospital, in Gaza City, to the neonatal intensive care unit of a maternity hospital, in Rafah, southern Gaza Strip." Hostilities in the Gaza Strip and Israel | Flash Update #44, OCHA, November 19, 2023, https://www.ochaopt.org/content/hostilities-gaza-strip-and-israel-flash-update-44 (accessed October 29, 2024).

^{104 &}quot;Gaza: Israeli Attacks Devastate Lives of Children with Disabilities, Explosive Weapons, Unlawful Blockade Inflict Profound Trauma, Suffering," Human Rights Watch news release, September 30, 2024, https://www.hrw.org/news/2024/09/30/gaza-israeli-attacks-devastate-lives-childrendisabilities#:~:text=The%20United%20Nations%20Children's%20Fund,Gaza%20already%20had%20a%20disability.

up on their and their babies' health in the weeks following birth due to the prevailing situation. 105

The sub-optimal prenatal care—or no care at all—pregnant women in Gaza have been getting heightens the risk of complications after giving birth. "Some women are delivering prematurely, often with postpartum complications exacerbated by their living conditions," said Mohamad Shihada, MSF's nursing team supervisor working in the organization's neonatal intensive care unit of al-Nasser hospital, in July. 106 In September, MSF said that across the three medical facilities its staff were operating in, 25 percent of women who had Cesarean sections developed infections afterwards.

An international medical worker said that because women were being discharged from hospital so soon after delivery to make way for other patients, they were not receiving the usual post-partum support and counseling from healthcare providers. Such support includes advice to mothers on how to care for themselves and their infants; how to maintain hygiene and promote healing in challenging circumstances; how to bond with their infants, important for infant development; and how to support breastfeeding.¹⁰⁷

Inadequate Nutrition for Babies

Feeding infants in Gaza during the hostilities has been a particular challenge. Pregnant women, new mothers, and medical staff said breastfeeding has been complicated by stress, birth trauma, lack of adequate nutrition and water for new mothers, and lack of privacy in conditions of displacement. 108

¹⁰⁵ "Gaza's silent killings: The destruction of the healthcare system in Rafah," MSF, April 29, 2024, https://www.msf.org/gazas-silent-killings-destruction-healthcare-system-rafah (accessed October 30, 2024).

¹⁰⁶ "Living conditions threaten the lives of pregnant women and newborns in Gaza," MSF, July 18, 2024, https://www.msf.org/living-conditions-are-threatening-lives-pregnant-women-gaza (accessed October 30, 2024).

¹⁰⁷ Mary Beth Steinfeld, M.D. "Bonding is essential for normal infant development," *UC Davis Health*, https://health.ucdavis.edu/news/health-wellness/bonding-is-essential-for-normal-infant-development/2010/01 (accessed November 7, 2024); Human Rights Watch remote interview with Rondi Anderson, Project HOPE's Senior Technical Advisor for Reproductive, Maternal, Newborn, and Child Health, August 7, 2024.

^{108 &}quot;Gaza's silent killings: The destruction of the healthcare system in Rafah," MSF, April 29, 2024, https://www.msf.org/gazas-silent-killings-destruction-healthcare-system-rafah (accessed October 30, 2024); Charlotte Lindsey-Curtet, Florence Tercier Holst-Roness, Letitia Anderson, "Addressing the Needs of Women, Affected by Armed Conflict, An ICRC Guidance Document," ICRC, March 2004,

https://www.icrc.org/sites/default/files/external/doc/en/assets/files/other/icrc_002_0840_women_guidance.pdf (accessed October 30, 2024).

Some families have faced difficulties obtaining formula in cases where mothers are not breastfeeding or when infants need supplemental nutrition. Some said they did not have adequate access to drinking water for formula. Abdulhafith al-Khalidi said before he evacuated from Gaza in March, babies in his family and of friends regularly suffered from fevers and digestive issues. He said the water they had access to was so contaminated, that when added to formula powder, it simply did not mix. 109 In a letter to the Biden administration in July, American healthcare workers who had volunteered in Gaza stated they "watched malnourished new mothers feed their underweight newborns infant formula made with poisonous water." 110

MSF reported in April that "formula milk is not easily available, nor is drinking water to mix it with or to properly clean the bottles." An international medical worker said the lack of clean water in Gaza as well as the low availability of formula meant that feeding babies formula was "extremely precarious." 112

These conditions have been making children sick. Cases of diarrhea in children under 5 years of age rose from 48,000 to 71,000 in just one week starting December 17, 2023, equivalent to 3,200 new cases of diarrhea per day, according to UNICEF.¹¹³ The 3,200 new daily cases recorded in December represented a 2,000 percent increase from the average rate of cases prior to October 7.¹¹⁴

¹⁰⁹ Human Rights Watch interview with Abdulhafith Faisal al-Khalidi, Doha, June 25, 2024.

¹¹⁰ "Letter to President Biden and Vice President Harris" "Re: American physicians' and nurses' observations from the Gaza Strip since October 7, 2023," *Gaza Healthcare Letters*, July 25, 2024, https://www.gazahealthcareletters.org/usa-letter-july-25-2024 (accessed December 9, 2024).

¹¹¹ "Gaza's Silent Killings The destruction of the healthcare system and the struggle for survival in Rafah," MSF, Report, April 2024, https://msf.org.pt/wp-content/uploads/sites/4/2024/04/MSF-GazaSilentKillings-Full-Report_ENG_April-2023-1.pdf (accessed October 30, 2024).

 $^{^{112}}$ Human Rights Watch remote interview with an international medical worker, August 16, 2024.

¹¹³ "Intensifying Conflict, Malnutrition and Disease in The Gaza Strip Creates A Deadly Cycle That Threatens Over 1.1 Million Children," UNICEF, January 5, 2024, https://www.unicef.org/press-releases/intensifying-conflict-malnutrition-and-disease-gaza-strip-creates-deadly-cycle (accessed October 30, 2024).

¹¹⁴ "Intensifying conflict, malnutrition and disease in the Gaza Strip creates a deadly cycle that threatens over 1.1 million children", UNICEF, January 5, 2024, https://www.unicef.org/lac/en/press-releases/intensifying-conflict-malnutrition-and-disease-gaza-strip-creates-deadly-cycle (accessed August 27, 2024).

In July, MSF staff reported seeing children with dehydration, hepatitis A, and skin infections. 125

Several people told Human Rights Watch they knew of children, including their own, contracting hepatitis A and suffering diarrhea and vomiting.

Asma Taha, a pediatric nurse practitioner, described seeing babies die "every day" in the letter to the Biden administration. She said, "they had been born healthy," but their "mothers were so malnourished that they could not breastfeed, and we lacked formula or clean water to feed them, so they starved."¹¹⁶

Psychological Impacts

The physical damage of Israel's relentless military offensive has caused deep psychological scars for many Palestinians in Gaza who have lost their homes and their sense of security and community.

All the pregnant women interviewed spoke about the extreme mental strain of living in constant fear for their lives and their pregnancy while in Gaza, leading to stress, fatigue and anxiety. They described the hardship of instability and stress, being forced to repeatedly relocate to seek safety and shelter following Israeli military evacuation orders. They all said they felt like they had to manage everything alone.

"I was constantly worried," R.M. said. "I kept thinking about giving birth during the war, day and night. ... I swear they were the worst days of my life, pregnancy during the war. ... I'm tired of saying I'm tired."

Ridana Zukhra described giving birth after being evacuated to Egypt:

I had a difficult birth. My body couldn't handle it with the displacement and exhaustion. I was suffering. When I gave birth, it was a very difficult

¹¹⁵ "Living conditions threaten the lives of pregnant women and newborns in Gaza," MSF, July 18, 2024, https://www.msf.org/living-conditions-are-threatening-lives-pregnant-women-gaza (accessed October 30, 2024).

[&]quot;Letter to President Biden and Vice President Harris" "Re: American physicians' and nurses' observations from the Gaza Strip since October 7, 2023," *Gaza Healthcare Letters*, July 25, 2024, https://www.gazahealthcareletters.org/usa-letter-july-25-2024 (accessed December 9, 2024).

delivery. For hours I was in labor, for hours I couldn't push from exhaustion. ... I gave birth, and my body needed rest, but I couldn't rest. I carried my breastfeeding baby and my injured daughter [with her amputated leg], one on either side. I told myself I had to handle all this on my own. ... My daughter now walks with an artificial limb.

Of the 305 women surveyed in March and April 2024 by UN Women, 75 percent said they regularly felt depressed, 65 percent frequently felt nervous and had nightmares, and 62 percent often were unable to sleep.¹¹⁷

Israel's attacks, the unlawful blockade, and its restrictions on humanitarian aid have also meant that mental health services were very limited. Mental health and psychosocial support services, which were already difficult to access prior to the hostilities, have grown even scarcer since the start of the Israeli military's attacks on Gaza. 119

¹¹⁷ Gender Alert: Gaza: A War on Women's Health, UN Women, September 2024 https://arabstates.unwomen.org/sites/default/files/2024-09/en-gender-alerthealthsep_24.pdf (accessed October 29, 2024).

^{118 &}quot;Palestine - Impact of the conflict on mental health and psychosocial support needs in Gaza," ACAPS, September 3, 2024, https://www.acaps.org/fileadmin/Data_Product/Main_media/20240903_ACAPS_Gaza__impact_of_the_conflict_on_mental_health_and_psychosocial_support_needs.pdf (accessed January 11, 2024).

¹¹⁹ "Gaza: Israeli Attacks Devastate Lives of Children with Disabilities, Explosive Weapons, Unlawful Blockade Inflict Profound Trauma, Suffering," Human Rights Watch news release, September 30, 2024, https://www.hrw.org/news/2024/09/30/gaza-israeli-attacks-devastate-lives-children-disabilities.

V. Pregnancy During Armed Conflict

The association between armed conflict and specific indicators of maternal and child health, such as rates of preterm birth, miscarriage, or maternal health outcomes, is poorly documented. However, available research suggests that armed conflicts have particularly adverse effects on maternal and newborn health.

A global study on maternal and child health, analyzing 20 years of data from the Uppsala Conflict Data Program and the World Bank, concluded that "armed conflict is associated with substantial and persistent excess maternal and child deaths globally, and with reductions in key measures that indicate reduced availability of organised healthcare." ¹²⁰ An article in the medical journal *The Lancet* concluded that, "[w]omen of reproductive ages living near high intensity conflicts have three times higher mortality than do women in peaceful settings" and "armed conflict increases indirect mortality among children and women." ¹²¹ A 2020 study covering three decades in 53 countries found that exposure to conflict is associated with miscarriage and stillbirth. ¹²²

¹²⁰ Mohammed Jawad et al., "Implications of armed conflict for maternal and child health: A regression analysis of data from 181 countries for 2000–2019," *PLOS Medicine* 18 (2021):9, accessed November 1, 2024, https://doi.org/10.1371/journal.pmed.1003810.

¹²¹ Eran Bendavid et al., "The effects of armed conflict on the health of women and children," Lancet 397 (2021): 10273, accessed November 1, 2024, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00131-8/fulltext.

¹²² Christine Valente, "Children of the Revolution: Fetal and Child Health amidst Violent Civil Conflict," Health, Econometrics and Data Group (HEDG) Working Papers (2011), accessed November 1, 2024, https://ideas.repec.org/p/yor/hectdg/11-12.html. (As conflict intensity increases, the likelihood of miscarriage increases, and so a smaller share of the frailer fetuses are carried to term.); Giancarlo Buitrago and Rodrigo Moreno-Serra, "Conflict violence reduction and pregnancy outcomes: A regression discontinuity design in Colombia." PLoS Medicine 18(2021):7, accessed November 1, 2024, https://doi.org/10.1371/journal.pmed.1003810.

Exposure to armed conflict appears to have negative impacts on birth outcomes.¹²³
Inadequate maternal nutrition and access to health care, often consequences of conflict, can also increase the likelihood of adverse maternal health and birth outcomes.¹²⁴

¹²³ See for example, James Keasley, Jessica Blickwedel, Siobhan Quenby, "Adverse effects of exposure to armed conflict on pregnancy: a systematic review," *BMJ Global Health* 2 (2017):e000377, accessed November 1, 2024, https://gh.bmj.com/content/2/4/e000377 that surveys 13 studies of maternal and birth outcomes from Libya, Bosnia, Herzegovina, Israel, Palestine, Kosovo, Yugoslavia, Nepal, Somalia, Iraq, Kuwait, and Afghanistan, and finds a relationship between exposure to armed conflict and low birth weight, and mixed associations for other birth outcomes. Harold Mera León, "Stillbirths, miscarriages and early losses in armed conflict contexts: The modification effect of violence: The Colombian case," *Social Science and Medicine*, 334 (2023), accessed November 1, 2024, https://doi.org/10.1016/j.socscimed.2023.116175 analyzes birth outcome data from Colombia in recent decades and finds,

https://doi.org/10.1016/j.socscimed.2023.116175 analyzes birth outcome data from Colombia in recent decades and finds, when controlled for age and proxies of socioeconomic stratification, a significant association between women living in the most violent regions and having a higher risk of stillbirths, miscarriages, or early losses than women living in less affected regions). Giancarlo Buitrago and Rodrigo Moreno-Serra, "Conflict violence reduction and pregnancy outcomes: A regression discontinuity design in Colombia." *PLoS Medicine* 18(2021):7, accessed November 1, 2024,

https://doi.org/10.1371/journal.pmed.1003810 analyzes birth outcome data for more than 3 million women during the two years before and after the 2015 ceasefire declaration in Colombia and finds that the ceasefire was associated with a decrease in the number of conflict events to which women were exposed during pregnancy, which, in turn, was associated with reduced risks of stillbirth and perinatal mortality. Christine Valente, "Children of the Revolution: Fetal and Child Health amidst Violent Civil Conflict," *Health, Econometrics and Data Group (HEDG) Working Papers* (2011), accessed November 1, 2024, https://ideas.repec.org/p/yor/hectdg/11-12.html studies birth outcomes in Nepal between 1996 and 2006 and finds that exposure to conflict in utero has both scarring and selection effects on survivors, and that as conflict intensity increases, the likelihood of miscarriage increases. Zachary Wagner et al., "Armed conflict and child mortality in Africa: a geospatial analysis," *Lancet* 392 (2018): 10150, accessed November 1, 2024,

https://www.thelancet.com/journals/lancet/article/PIISo140-6736(18)31437-5/abstract studies infant mortality rates in 35 African countries between 1995 and 2015 and finds that a child born within 50 km of an armed conflict had a risk of dying before reaching 1 year of age that was 5.2 per 1000 births higher than being born in the same region during periods without conflict

124 "Conflict is the major driver and amplifier of high levels of acute food insecurity, directly affecting food access and availability and the ability to cope with other shocks." "2024 Global Report on Food Crises," Global Network Against Food Crises, p. 12, https://www.fsinplatform.org/report/global-report-food-crises-2024/#download,accessed January 11, 2025. "Due to their increased nutrition needs, pregnant and breastfeeding women are frequently at particularly high risk of experiencing acute malnutrition as a result of armed conflict.... Malnutrition during pregnancy can be deleterious to both child and mother by increasing the risk of obstructed labor, premature or low-birth-weight babies, postpartum hemorrhage, and increased maternal mortality due to severe anemia," Andrew G Corley, "Linking armed conflict to malnutrition during pregnancy, breastfeeding, and childhood," Global Food Security 29 (2021): 100531, access January 11, 2025, https://doi.org/10.1016/j.gfs.2021.100531. Aamer Imdad and Zulfiqar A. Bhutta, "Maternal Nutrition and Birth Outcomes: Effect of Balanced Protein-Energy Supplementation," Pediatric and Perinatal Epidemiology 26 (2012):1, accessed November 1, 2024, https://doi.org/10.1111/j.1365-3016.2012.01308.x argues, "The nutritional status of a woman before and during pregnancy is important for a healthy pregnancy outcome. Maternal malnutrition is a key contributor to poor fetal growth, low birthweight (LBW) and infant morbidity and mortality and can cause long-term, irreversible and detrimental cognitive, motor and health impairments." Concerning the impacts of armed conflicts on maternal health care utilization, see for example, Adanna Chukwuma, Kerry L.M. Wong, and Uche Eseosa Ekhator-Mobayode, "Disrupted Service Delivery? The Impact of Conflict on Antenatal Care Quality in Kenya," Frontiers in Global Women's Health 2 (2021): 599731, accessed November 1, 2024, doi: 10.3389/fgwh.2021.599731, which says, "[T]here is a significant body of research that links maternal health care use to conflict, drawing on qualitative and quantitative approaches. In a study of the Syrian conflict, DeJong et al. demonstrate that [antenatal care] use fell from 87.7 to 62%, whereas [skilled birth attendance] coverage decreased from 96.2 to 72%, following conflict exposure. Akseer et al. published a time-series ecological study in 2020 that showed that inequalities in maternal health care use were higher in conflict than in non-conflict countries, with lower coverage rates among the poorest, least educated, and rural-dwelling households. Chukwuma and Ekhator-Mobayode also show that exposure to the Boko Haram insurgency reduced the probability of receiving any [antenatal care] and [skilled birth attendance]... Price and Bohara document a negative correlation between [antenatal care] coverage and violent events in

The WHO says conflict is a factor that increases the risk of mental disorders during pregnancy and in the first year after delivery. 125 It also says poor prenatal mental health can have a range of adverse impacts on both the mother and infant and the family more broadly from increased rates of serious maternal health illnesses to adverse birth outcomes such as low birthweight, to greater risk of poor physical health and emotional and behavioral problems for the child. 126

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Nepal during the Maoist insurgency after controlling for other determinants of health care access. Reductions in [antenatal care], [skilled birth attendance], and other maternal health care have also been demonstrated in Lebanon, Eastern Burma, and Uganda. Hence, overall, the empirical evidence indicates that exposure to conflict predicts falls in maternal health care utilization."). Black, Allen at al., "Maternal and child undernutrition: global and regional exposures and health consequences," Lancet 371 (2008): 9608, pp. 243-260, accessed November 1, 2024, https://www.thelancet.com/journals/lancet/article/PIISo140-6736(07)61690-0/abstract; Abu-Saad and Drora Fraser, "Maternal Nutrition and Birth Outcomes," Epidemiologic Reviews 31 (2010):1, accessed November 1, 2024, https://doi.org/10.1093/epirev/mxq001). See also "Low Birth Weight," WHO, Nutrition Landscape Information System (NLiS), https://www.who.int/data/nutrition/nlis/info/low-birth-weight (accessed November 1, 2024), which argues, "At a population level, the proportion of infants with a low birth weight is an indicator of a multifaceted public health problem that includes long-term maternal malnutrition, ill-health and poor health care in pregnancy."). "Ensuring Healthy Births Through Prenatal Support," Center for American Progress, January 31, 2020, https://www.americanprogress.org/article/ensuringhealthy-births-prenatal-support/ (accessed November 1, 2024) says, "Compared with infants born to mothers who received prenatal care, infants whose mothers did not receive prenatal care are three times more likely to have a low birth weight defined by the World Health Organization as a weight of less than 5.5 pounds—and are five times more likely to die in infancy. Low weight and preterm birth in infants contribute to additional complications, including an increased risk of sudden infant death syndrome (SIDS), respiratory and gastrointestinal problems, and other long-term health complications. Women who do not receive prenatal care are also three to four times more likely to die from pregnancy-related complications than those who do receive care.".

[&]quot;Virtually all women can develop mental disorders during pregnancy and in the first year after delivery, but poverty, migration, extreme stress, exposure to violence (domestic, sexual and gender-based), emergency and conflict situations, natural disasters, and low social support generally increase risks for specific disorders. "Maternal mental health," WHO https://www.who.int/teams/mental-health-and-substance-use/promotion-prevention/maternal-mental-health#:~:text=Worldwide%20about%2010%25%20of%20pregnant,trained%20non%2Dspecialist%20health%20providers (accessed November 1, 2024).

[&]quot;Guide for integration of perinatal mental health in maternal and child health services," WHO, 2022, https://iris.who.int/bitstream/handle/10665/362880/9789240057142-eng.pdf?sequence=1 (accessed November 1, 2024).

VI. Relevant International Humanitarian and Human Rights Law

Armed conflict between Israel and Hamas and other Palestinian armed groups in Gaza is governed by international humanitarian law, also known as the laws of war. This includes the Geneva Conventions of 1949, notably Common Article 3 and the law of occupation, as well as customary international humanitarian law. International human rights law applies to Israel where it has effective control in the Occupied Palestinian Territory.

International Humanitarian Law

As the occupying power in Gaza, Israel has the obligation under article 55 of the Fourth Geneva Convention to ensure that the civilian population gets food, water, and medical supplies "[t]o the fullest extent of the means available to it." The ICRC Commentary of 1958 on the Fourth Geneva Convention states that "the Occupying Power is responsible for the provision of supplies for the population and places that Power under a definite obligation to maintain at a reasonable level the material conditions under which the population of the occupied territory lives." The Commentary clarifies that it "essential" that the occupying power takes the necessary measures to procure the necessary food and medical supplies needed by the population of the occupied territory.

The Fourth Geneva Convention and customary international humanitarian law provide special protections for women and children. The Fourth Geneva Convention states that expectant mothers "shall be the object of particular protection and respect." The ICRC Commentary sets out that the specific needs of pregnant women and mothers of young children be treated with particular care with regard to the provision of food, clothing, medical assistance, evacuation, and transportation. Expectant mothers are entitled to adequate medical care and priority in treatment based on medical grounds. 131

¹²⁷ Geneva Convention Relative to The Protection of Civilian Persons in Time of War of 12 August 1949, Fourth Geneva Convention, article 55.

¹²⁸ ICRC, Commentary to the Fourth Geneva Convention (1958), article 55.

¹²⁹ Ibid.

¹³⁰ Fourth Geneva Convention, article 16; ICRC, "Customary International Humanitarian Law," rule 134.

¹³¹ ICRC, "Customary International Humanitarian Law," rule 134.

Warring parties must allow and facilitate the rapid and unimpeded passage of humanitarian relief for civilians in need. They may not arbitrarily refuse to allow delivery of humanitarian assistance. They are specifically obligated to allow the free passage of all consignments of medical and hospital stores and of essential foodstuffs, clothing and medical supplies intended for children under 15, expectant mothers, and maternity cases.¹³²

Human Rights Watch has found that Israel's effective blockade of Gaza constitutes collective punishment of the civilian population and the use of starvation as a method of warfare. These are grave breaches of the Fourth Geneva Convention and customary international humanitarian law, and amount to war crimes.

Human Rights Watch has also found that since October 2023, Israeli authorities have deprived Palestinians in Gaza of access to the amount of water needed for survival, including by cutting and later restricting water and fuel in the Gaza Strip, and cutting off electricity, and by deliberately destroying water and sanitation infrastructure and materials used to repair water infrastructure. ¹³⁴ Israeli authorities' actions amount to the intentional creation of conditions of life calculated to bring about the destruction of part of the civilian population of Gaza. This was part of a mass killing of members of the civilian population, and, as a state policy, amounts to a widespread and systematic attack directed against a civilian population.

Israeli officials are responsible for the crime against humanity of extermination, which is an ongoing crime. They are also responsible for acts of genocide, as defined by the Genocide Convention, and may be responsible for the crime of genocide, which requires acts of genocide to be committed with genocidal intent.

¹³² Each High Contracting Party shall allow the free passage of all consignments of medical and hospital stores and objects necessary for religious worship intended only for civilians of another High Contracting Party, even if the latter is its adversary. It shall likewise permit the free passage of all consignments of essential foodstuffs, clothing and tonics intended for children under 15, expectant mothers and maternity cases The Geneva Conventions of August 12, 1949, *International Committee of the Red Cross*, Geneva, Article 23 - Consignment of medical supplies, food and clothing.

¹³³ "Israel: Starvation Used as Weapon of War in Gaza," *Human Rights Watch* news release, December 18, 2023, https://www.hrw.org/news/2023/12/18/israel-starvation-used-weapon-war-gaza.

¹³⁴ Human Rights Watch, *Extermination and Acts of Genocide: Israel Deliberately Depriving Palestinians in Gaza of Water* (2024), https://www.hrw.org/report/2024/12/19/extermination-and-acts-genocide/israel-deliberately-depriving-palestinians-gaza.

International Human Rights Law

Israel's obligations as an occupying power under international humanitarian law to provide for the well-being of the civilian population are spelled out under international human rights law. Israel is a party to the International Covenant on Economic, Social and Cultural Rights (ICESCR), which remain applicable during armed conflicts.

Israel maintains that its human rights obligations do not extend to the occupied territories. However the UN Committee on Economic, Social and Cultural Rights, the body charged with interpreting the ICESCR, have repeatedly found that states are bound to respect the human rights treaties they have ratified outside their state borders, and that the provisions in the ICESCR, as well as other human rights treaties, "apply to all territories and populations under its effective control." The International Court of Justice endorsed this view in its 2004 Advisory Opinion regarding Israel's separation barrier, and stated that Israel is "bound by the provisions of the International Covenant on Economic, Social and Cultural Rights," in the territories that it occupies, including Gaza. 136

Israel bears the obligations to respect, protect, and fulfill all economic, social, and cultural rights, including the rights to food, water, housing, and health.

The UN Committee on Economic, Social and Cultural Rights, in its general comments interpreting the obligations of states with respect to the rights enshrined in the ICESCR, has reiterated that states must comply with certain core obligations that represent the minimum essential levels of these rights, non-compliance with which cannot be justified even in times of conflict, as they are non-derogable.

¹³⁵ United Nations, Economic and Social Council, E/C.12/ISR/CO/4, November 12, 2019, paras. 15 and 31 https://documents.un.org/doc/undoc/gen/g19/322/94/pdf/g1932294.pdf; See also, CESCR, Concluding observations on the fourth periodic report of Israel*, E/C.12/ISR/CO/4, November 12, 2019; United Nations Human Rights Committee (HRC), "Concluding Observations on the Fourth Periodic Report of Israel," CCPR/C/ISR/CO/4, November 21, 2014, para. 5, https://bit.ly/2koggJV; See also the numerous prior HRC concluding observations on Israel, for example, CCPR/CO/ISR/3, September 3, 2010, para. 5; CCPR/CO/78/ISR, August 5, 2003, para. 11; CCPR/C/79/Add.93, August 18, 1998, para. 10; Article 2 of the ICCPR itself notes that the Covenant should apply to "all individuals within its territory and subject to its jurisdiction."

¹³⁶ International Court of Justice, Advisory Opinion Concerning Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, ICJ General List, No.131, ICJ Rep 136, July 9, 2004, https://bit.ly/345310j (accessed October 25, 2019), para. 112.

Article 12 of the ICESCR recognizes the right of everyone to the enjoyment of the highest attainable standard of physical and mental health. The committee, in its general comment on the right to health, outlines immediate, core obligations to the right to health that must be complied with, regardless of the circumstances. ¹³⁷ These include:

- ensuring the right of access to health facilities, goods and services on a nondiscriminatory basis, especially for vulnerable or marginalized groups;
- ensuring access to the minimum essential food that is nutritionally adequate and safe, to ensure freedom from hunger to everyone;
- ensuring access to basic shelter, housing and sanitation, and an adequate supply
 of safe and potable water;
- providing essential drugs as defined under the WHO Action Programme on Essential Drugs; and
- ensuring equitable distribution of all health facilities, goods and services.

The Committee also confirmed additional "obligations of comparable priority" to these non-derogable minimum core obligations, including:

- ensuring reproductive, maternal (prenatal as well as post-natal) and child health care;
- providing immunization against the major infectious diseases occurring in the community;
- taking measures to prevent, treat and control epidemic and endemic diseases;
- providing education and access to information concerning the main health problems in the community, including methods of preventing and controlling them; and
- providing appropriate training for health personnel, including education on health and human rights.¹³⁹

¹³⁷ UN Committee on Economic, Social and Cultural Rights, "Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights," General Comment No. 14, The Right to the Highest Attainable Standard of Health, E/C.12/2000/4 (2000),

https://www.ohchr.org/sites/default/files/Documents/Issues/Women/WRGS/Health/GC14.pdf (accessed November 1, 2004).

¹³⁸ Ibid.

¹³⁹ Ibid.

In situations of armed conflict, the Convention on the Rights of the Child, to which Israel is a party, directs states to "undertake to respect and ensure respect of rules of international humanitarian law which are relevant to the child and ensure protection and care of children who are affected by the armed conflict." The UN Committee on the Rights of the Child has noted provisions of the Convention that are essential for the realization of the rights of children affected by armed conflict. These include, in part: protection of children within the family environment; ensuring the provision of essential care and assistance; access to food, health care and education; and ensuring humanitarian assistance and relief and humanitarian access to children. The second relief and humanitarian access to children.

¹⁴⁰ Convention on the Rights of the Child (CRC), adopted November 20, 1989, G.A. Res. 44/25, annex, 44 U.N. GAOR Supp. (No. 49) at 167, U.N. Doc. A/44/49 (1989), entered into force September 2, 1990, art. 38.

¹⁴¹ UN Committee on the Rights of the Child, Report on the Second session, UN Doc. CRC/C/10, October 19, 1992, section 73.

Recommendations

To the Israeli Government

Consistent with its obligations as an occupying power under international humanitarian law and international human rights law with respect to the right to health of all people in Gaza, notably pregnant women and girls and their children, the Israeli government should:

- End unlawful attacks on civilians and civilian objects, including those essential for the survival of Gaza's population, such as medical facilities and water and sanitation infrastructure:
- Restore access to electricity, water, and telecommunications services to the civilian population;
- Facilitate the urgent restoration of Gaza's healthcare system so that all patients, including pregnant women and babies, have access to quality medical care;
- Take all measures to ensure that the civilian population gets food, water, and medical supplies to the fullest extent of the means available to it, with a particular focus on pregnant women and newborns by:
 - Stop obstructing humanitarian assistance particularly food, including those items needed by children on special diets, water, medicine, assistive devices, and fuel – from entering Gaza by fully opening its crossings, urgently opening additional ones, and not placing unjustified restrictions that prevent humanitarian goods from entering Gaza;
 - Ensure that humanitarian aid can reach all parts of the Gaza Strip and that civilians can safely receive it;
 - Lift the closure of Gaza and permit the free movement of civilians and goods to and from Gaza, subject to individual screenings and physical inspections for security purposes only as necessary, with transparent requirements; publish lists of banned items that are consistent with international standards on "dual-use" items, and provide written justification for any rejections, with the possibility of appeal;
 - Eliminate the "dual-use" label on medical-related supplies, assistive aids, and accessible technology like eyeglasses, wheelchairs, walkers, canes, hearing aids, and other assistive devices needed by people with disabilities and people with chronic health conditions, the restriction of

which invariably has a disproportionate negative impact on civilians compared to any military advantage;

- Permit Palestinian civilians in Gaza who choose to exercise their right to leave
 Gaza, including for medical treatment, to travel abroad via Israel; reopen the Israeli
 side of the Rafah border crossing with Egypt to ensure that Palestinian civilians in
 Gaza who choose to exercise their right to leave Gaza, including for medical
 treatment, will not without a lawful reason be prevented from doing so, while
 ensuring their right to return to Gaza;
- During hostilities, where evacuation is unavoidable, implement an evacuation system that provides accurate and timely information to the civilian population with instructions on how to safely reach evacuation areas, and that ensures they are safe, have adequate shelter, and meets other humanitarian requirements;
- When issuing evacuation orders, take into account the needs of people with
 disabilities, and those who are sick or injured, many of whom are unable to leave
 without assistance. Ensure that evacuation areas can provide for the needs of
 pregnant people, people with disabilities, the sick, and the injured;
- Support the provision of mental health and psychosocial support services to expectant mothers and women who recently gave birth.

To the Egyptian Government

- Keep the Egyptian-controlled side of the Rafah border crossing open to Palestinian
 civilians who want to exercise their right to leave Gaza, in line with the customary
 international law obligation of nonrefoulement, not to expel or return anyone to a
 place where they would face the threat of persecution, torture, or other serious
 harm;
- Ensure Palestinians fleeing Gaza are provided with basic services and support, including access to health care, education, and protection, and help to facilitate the onward movement of Palestinians from Gaza who have legal pathways to other countries.

To All Governments

- Publicly condemn violations of international humanitarian law by all parties to the conflict in Gaza, including Israel's forced displacement of the civilian population in Gaza as a war crime and crime against humanity;
- Publicly condemn Israel's violations of international human rights law against the civilian population of Gaza, including with respect to the rights to food, water, shelter, health, and other fundamental rights;
- Call upon Israeli authorities to immediately end violations and cooperate with international judicial bodies and investigative mechanisms;
- Continue to support the efforts of the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) in the Occupied Palestinian Territory and more broadly by providing adequate funding for:
 - the humanitarian response in Gaza, including resources for sexual and reproductive health services;
 - strengthening information networks to ensure that women and other vulnerable groups know where to go and how to access humanitarian assistance and medical services;
 - Establishing mother and child safe spaces in collective centers to increase privacy and specialized services for pregnant women, adolescent girls, and children;
 - Supporting the urgent restock of hospitals and health clinics with essential
 medications, medical supplies, and electricity/fuel, especially targeting the
 needs of women and girls (including nutritional supplements for pregnant
 women and infants, and resources for birthing mothers);
 - Mental health and psychosocial support services for people in Gaza, especially pregnant women and children, and also for humanitarian responders and health workers – including through accessible helplines and improved access to up-to-date referral information across sectors.
- Press Israel to ensure reproductive medical and mental health specialists can enter Gaza without restrictions;
- Abide by the International Court of Justice's binding orders and advisory opinion.
 Consider the review and possible suspension of bilateral agreements with Israel, such as the European Union-Israel Association Agreement, and the United States-Israel Free Trade Agreement;

- Suspend military assistance and arms sales to Israel so long as its forces commit violations of international humanitarian law with impunity;
- Enforce domestic legislation limiting the transfer of arms and military assistance for violations of international human rights and humanitarian law;
- Publicly support the International Criminal Court, uphold the court's independence, and publicly condemn efforts to intimidate or interfere with its work, officials, and those cooperating with the institution;
- Urge Israel to grant access to independent, international monitors, including from the UN Commission of Inquiry on the Occupied Palestinian Territory and the Special Procedures;
- Impose targeted sanctions, including travel bans and asset freezes, against Israeli
 officials credibly implicated in ongoing serious violations, for the purpose of
 ending these violations;
- Address long-standing impunity by Israeli authorities and Palestinian armed groups for serious crimes under international law, and support reparations for all victims of gross human rights abuses;
- Support the creation of a register of damages, caused by unlawful Israeli action to persons in the Occupied Palestinian Territory, for the purposes of calculating reparations.

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"Five Babies in One Incubator"

Violations of Pregnant Women's Rights Amid Israel's Assault on Gaza

Since the start of hostilities in Gaza in October 2023, the Israeli government has imposed an unlawful blockade, severely restricted humanitarian aid, denied civilians access to water, and attacked medical facilities and personnel. As a result, pregnant women and girls in Gaza have faced extraordinary challenges before, during, and after delivery.

"Five Babies in One Incubator" details how the Israeli government's curtailment of food, clean water, medication, and other essentials have undermined women and the health of their pregnancy. Israeli authorities' forced displacement of some 90 percent of Gaza's population has hampered access to a nearly collapsed healthcare system that now offers little or no prenatal or postnatal care, and only minimal access to overcrowded and unsanitary care for obstetric emergencies.

For this report, Human Rights Watch interviewed 17 people between June and September 2024, including women who were pregnant in Gaza during the current hostilities, Gaza medical workers, and medical staff from international humanitarian organizations and agencies working in Gaza.

Israel as the occupying power in Gaza is obligated to uphold the rights of the population under international humanitarian and human rights law. The report finds that Israeli authorities violated the right to the highest attainable standard of health and other rights of pregnant women and girls, including the right to dignified, respectful health care throughout pregnancy, childbirth, and postpartum and newborn care. The Israeli government should take all measures to ensure the provision of basic services, humanitarian assistance, and medical care.



A Palestinian woman pregnant with triplets, suffers from malnutrition and extreme anemia due to food shortages, at a displaced persons camp in Rafah, Gaza, February 14, 2024. © 2024 Zagout/Anadolu via Getty Images