

COSTS OF WAR

The Human Toll: Indirect Deaths from War in Gaza and the West Bank, October 7, 2023 Forward

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Summary

This report covers the human costs of the Hamas strike and Israel's military operations since October 7, 2023 in Gaza and the West Bank. *Costs of War* is a research project focused on U.S. military spending, as well as direct and indirect deaths associated with U.S. wars and militarism. In just one year, as a companion report shows, the U.S. has spent at least \$22.76 billion on military aid to Israel and related U.S. operations in the region.² The current report gathers previously published data to provide an overview of the direct and indirect deaths that have resulted, and will continue to result, from U.S.-supported Israeli military operations.

This report covers just one front in the expanding regional war with a summary of events and figures from the past year. While our focus is on the largest impacts, there is additional harm in other areas of the war zone – in Israel, Lebanon, Yemen, and East Jerusalem – that this report does not cover. Further, current violence in Lebanon and elsewhere is not included, nor are some events that occurred in late September/early October 2024. The report includes United Nations estimates of Israeli and Palestinian direct deaths from violence in Israel, Gaza, and the West Bank since October 7.

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² See "United States Spending on Israel's Military Operations and Related U.S. Operations in the Region, October 7, 2023-September 30, 2024."

https://watson.brown.edu/costsofwar/papers/2024/USspendingIsrael

In addition to killing people directly through traumatic injuries, wars cause "indirect deaths" by destroying, damaging, or causing deterioration of economic, social, psychological and health conditions.³ Most expansively, this report describes the causal pathways that can be expected to lead to far larger numbers of indirect deaths.⁴ These deaths result from diseases and other population-level health effects that stem from war's destruction of public infrastructure and livelihood sources, reduced access to water and sanitation, environmental damage, and other such factors.⁵

This report builds on a foundation of previous *Costs of War* research for its framework and methodology in covering the most significant chains of impact, or causal pathways, to indirect war deaths in Gaza and the West Bank.⁶ Unlike in combat, these deaths do not necessarily occur immediately or in the close aftermath of the battles which many observers focus on. While it will take years to assess the full extent of these population-level health effects, they will inevitably lead to far higher numbers of deaths than direct violence.

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³ In other words, this war has caused "excess deaths"—that is, deaths that would not have occurred in a counterfactual scenario of no Israeli military operations—including deaths beyond those that occur immediately as a result of military violence. Jamaluddine, Z.; Chen, Z.; Abukmail, H.; Aly, S.; Elnakib, S.; Barnsley, G.; et al. (2024). Crisis in Gaza: Scenario-based health impact projections. Report One: 7 February to 6 August 2024. London, Baltimore: London School of Hygiene and Tropical Medicine, Johns Hopkins University. https://aoav.org.uk/wp-content/uploads/2024/02/gaza projections report.pdf, P. 12.

⁴ "Causal pathways" is the epidemiological term for this long sequence of war's consequences, a pattern of damages that can lead to death, disabilities and other long-lasting physical and mental health conditions. Wise, P. H. (2017, January 1). The Epidemiologic Challenge to the Conduct of Just War: Confronting Indirect Civilian Casualties of War. Daedalus, 146(1):139-154, p. 143.

⁵ A complex issue in scholarly discussions of "indirect deaths" in war is that of intentionality. When warring parties intentionally attack food distribution, for instance, this raises the question of whether the ensuing deaths should actually be considered direct, rather than indirect, results of combat. According to the Geneva Conventions and their Additional Protocols, international treaties that are ratified by many countries and form the basis of international humanitarian law, wars' expected damage to civilians should never be intentional, though the protocols acknowledge that such damage may occur as a side effect. In the case of the Israeli government's operations in Gaza, the question of intentionality in regards to civilian deaths is being, and will continue to be, debated. For the purposes of this report, however, the category of "indirect deaths" includes all non-violent war deaths, whether intentional or not.

⁶ Savell, S. (2023, May 15). How Death Outlives War: The Reverberating Impact of the Post-9/11 Wars on Human Health. Costs of War, Watson Institute, Brown University. https://watson.brown.edu/costsofwar/papers/2023/IndirectDeaths

United Nations Direct Death Estimates in Israel, Gaza, and the West Bank

The United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)'s most updated figures, as of October 1, 2024, are displayed below.

Figure 1: Direct Deaths from Violence Reported in Israel, Gaza and the West Bank (Oct. 7, 2023 - Oct. 1, 2024)

Israeli Fatalities in Israel	1,2007
Israeli Fatalities in Gaza	3468
Israeli Fatalities in West Bank	339
Palestinian Fatalities in Gaza	41,615 ¹⁰
Palestinian Fatalities in West Bank	69311
Palestinians Missing/Estimated Dead Under the Rubble	10,00012
Total	> 53,887

Note: There were 62,413 additional deaths from starvation, according to the October 2, 2024, "Appendix to letter of October 2, 2024 re: American physicians observations from the Gaza Strip since October 7, 2023." For estimates of indirect deaths, see Figure 2, below.¹³

⁷ This includes fatalities on October 7, 2023 and the immediate aftermath, including foreign nationals. Source: UNOCHA. *Reported impact snapshot/ Gaza Strip (25 September 2024).*

https://www.ochaopt.org/content/reported-impact-snapshot-gaza-strip-25-september-2024.

⁸ These 346 are Israeli soldiers killed since the start of the ground operation, between Oct. 7, 2023 - Sept. 25, 2024. OCHA's source is the Israeli military website. Additionally, there are an estimated 101 Israeli hostages that remain in Gaza. Source: UNOCHA. *Reported impact snapshot/ Gaza Strip (25 September 2024)*. https://www.ochaopt.org/content/reported-impact-snapshot-gaza-strip-25-september-2024

⁹ Between Oct. 7, 2023 – Sept. 23, 2024. This includes 23 Israelis killed in the West Bank and 10 Israelis killed in Israel in attacks by Palestinians from the West Bank. Source: UNOCHA. (2024, September 25). *Humanitarian Situation Update #222, West Bank*. https://www.ochaopt.org/content/humanitarian-situation-update-222-west-bank

¹⁰ Between Oct. 7, 2023 – Sept. 30, 2024. Source: UNOCHA. (2024, September 30). *Humanitarian Situation Update #224, Gaza Strip*. https://www.ochaopt.org/content/humanitarian-situation-update-224-gaza-strip
¹¹ Between Oct. 7, 2023 – Sept. 23, 2024. This number includes Palestinians killed in West Bank and East Jerusalem. Source: UNOCHA. (2024, September 25). *Humanitarian Situation Update #222, West Bank*. https://www.ochaopt.org/content/humanitarian-situation-update-222-west-bank

¹² More than 10,000 people are reported missing or under the rubble. Source: UNOCHA. *Reported impact snapshot/ Gaza Strip, 25 September 2024.* https://www.ochaopt.org/content/reported-impact-snapshot-gaza-strip-25-september-2024.

¹³ "Letter to President Biden and Vice President Harris: Open Letter from American Medical Professionals who Served in Gaza," (2024, October 2), https://www.gazahealthcareletters.org/usa-letter-oct-2-2024. The appendix to the letter can be found at:

These United Nations numbers have been contested. ¹⁴ Counting war deaths of any kind – direct or indirect – is notoriously difficult. Mortality data from war zones is often missing, unreliable, or hard to access, and can be influenced by political orientations. There are widely varying techniques of counting.

Indirect Deaths in Gaza and the West Bank

Figure 2: Estimates of Indirect Deaths in Gaza (Oct. 7, 2023 - Sept. 30, 2024)¹⁵

Estimated Deaths from Starvation	62,413
Estimated Deaths from Lack of Access to Care for Chronic Diseases	5,000
Estimated Deaths from Infectious Diseases, Maternal/Neonatal Deaths, and Others	?
Total	> 67,413

Note: An article in *The Lancet* in July 2024 estimated that there were 186,000 direct *and* indirect deaths attributable to the war in Gaza as of June 19, 2024.¹⁶

 $\frac{https://static1.squarespace.com/static/66e083452b3cbf4bbd719aa2/t/66fcd754b472610b6335d66f/1727846228615/Appendix + 20241002.pdf}{20241002.pdf}$

https://static1.squarespace.com/static/66e083452b3cbf4bbd719aa2/t/66fcd754b472610b6335d66f/1727846228615/Appendix+20241002.pdf. These figures do not include estimated deaths from infectious and non-communicable diseases, maternal and neonatal deaths, or other pathways. The doctors drew on varying sources to compile their figures and to explain estimated pathways to indirect deaths. An important source was an article by American, British, and Canadian experts published in *The Lancet*. These experts used the conservative ratio of one death from traumatic injury to four indirect deaths in estimating that upwards of 186,000 deaths (direct and indirect) were already attributable to the war in Gaza as of June 19, 2024. See Rasha Khatib, Martin McKee, Salim Yusuf. (2024, July 20). "Counting the dead in Gaza: difficult but essential." The Lancet. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)01169-3/fulltext.

16 See Footnote 16.

¹⁴ The UN gets its numbers of reported Palestinian deaths from the Gaza Ministry of Health. *The Lancet* and other publications have reported varying estimates of mortality. See Rasha Khatib, Martin McKee, Salim Yusuf. (2024, July 20). "Counting the dead in Gaza: difficult but essential." *The Lancet*. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)01169-3/fulltext. Most recently, the "Appendix to letter of October 2, 2024 re: American physicians observations from the Gaza Strip since October 7, 2023" contains a robust recent data set. See:

 $[\]frac{https://static1.squarespace.com/static/66e083452b3cbf4bbd719aa2/t/66fcd754b472610b6335d66f/1727846228615/Appendix + 20241002.pdf}{2028615/Appendix + 20241002.pdf}$

¹⁵ The indirect death estimates in Figure 2 were compiled by a group of 99 American medical professionals who have served in Gaza since October 7, 2023, as part of a letter to the Biden Administration with an accompanying appendix. "Letter to President Biden and Vice President Harris: Open Letter from American Medical Professionals who Served in Gaza," (2024, October 2, 2024) https://www.gazahealthcareletters.org/usa-letter-oct-2-2024. The appendix to the letter can be found here:

U.S.-backed Israeli military operations after October 7, 2023 against Palestinians in Gaza have only escalated, and show no signs of slowing down. The same period has seen significant escalations in Israeli military operations in the West Bank. Israel has used aerial bombing, ground offensives, drone attacks, military raids, torching and demolition of homes, armored personnel carriers, bulldozers, snipers, curfews, and operation of military checkpoints in Gaza and the West Bank.

The Gaza Strip and the West Bank, both occupied by Israel in 1967, are home to 2.23 million and 3 million Palestinians respectively. As of March 2023, there were also over 700,000 Israeli settlers in the West Bank (including East Jerusalem). The Gaza Strip has the same land area as Las Vegas but three times the population. The West Bank is approximately the size of Delaware and has roughly four times the population, including settlers.

Baseline levels for the health indicators described in this report were already very low due to years of Israeli restrictions on movement of goods and people, land confiscations, displacement, and environmental contamination in Gaza and in the West Bank. This last year of war has compounded Palestinians' vulnerability in the two territories, making a bad situation catastrophic. The scale and rapidity of Gaza's destruction in particular is unprecedented, not only in Palestinian history but in recent global history.

This report compiles information about the pathways to indirect death¹⁹ in Gaza and the West Bank during this year of war.²⁰ This report gathers existing information from reports and interim assessments that have been issued in the past year by international organizations, from analyses published by public health researchers at universities internationally, and reports by Israeli and Palestinian nongovernmental organizations, and, due to the evolving nature of the conflict, from news pieces. Information is often piecemeal in war because the people gathering it are also the people being killed, injured, imprisoned, intimidated, and displaced. Through compilation it seeks to convey a broad, if incomplete, understanding of the population-level health impacts of Israeli military operations in these two territories. No age group or gender has been spared. But we note the vulnerability of

¹⁷ This report does not cover East Jerusalem, which Israel annexed after occupying it in 1967 and which is home to 362,00 Palestinians, nor does it include the Golan Heights, which Israel also occupied in 1967 and later annexed, and where roughly 20,000 Druze and 25,000 Jewish settlers live.

¹⁸ UN Human Rights Office of the High Commissioner. (2023, March 28). Human Rights Council Hears that the Current Israeli Plan to Double the Settler Population in the Occupied Syrian Golan by 2027 is Unprecedented, and that 700,000 Israeli Settlers Are Living Illegally in the Occupied West Bank. https://www.ohchr.org/en/news/2023/03/human-rights-council-hears-current-israeli-plan-double-settler-population-occupied (accessed 23 September 2024). There are at least 1.9 million Palestinians with Israeli citizenship living inside Israel, where they make up over 20 percent of the population.

¹⁹ Guha-Sapir, D. (2021, January 26-28). Roundtables on Indirect Death. Costs of War Project and United Against Inhumanity Conference, Boston University.

²⁰ Direct and indirect deaths have also resulted from Israel's military operations in East Jerusalem, within Israel, as well as in neighboring Lebanon and Yemen since October 7, 2023. This report only covers Gaza and the West Bank.

children under five, women, the elderly, and the disabled. By one estimate, children have been over 3.7 times more likely to die now in Gaza than they were before the war.²¹

Figure 3. Causal Pathways to Indirect Deaths in Wars



One of the key pathways to indirect death stems from damage and destruction of infrastructure. In just the first four months of the war, a report published by the EU, World Bank, and UN estimated that the damages amounted to \$18.5 billion, with 60 to 70 percent of all infrastructure being damaged or destroyed. As one example from September 2024, Amnesty International reported that the Israeli military had destroyed or severely damaged 90 percent of the buildings within an area of 22.39 square miles (3,500 structures) in Gaza's "buffer zone" along the perimeter with Israel. As one example from September 2024, and the series of the buildings within an area of 22.39 square miles (3,500 structures) in Gaza's "buffer zone" along the perimeter with Israel.

https://www.amnesty.org/en/latest/news/2024/09/israel-opt-israeli-military-must-be-investigated-for-war-crime-of-wanton-destruction-in-gaza-new-investigation/.

 $^{^{21}}$ Jamaluddine Z.; Checchi, F.; Campbell, O.M.R. (2023, December 9). Excess mortality in Gaza: Oct 7-26, 2023. Lancet. (10418):2189-2190. P. 2189.

²² EU, World Bank, UN. (2024, March 29). Gaza Strip Interim Damage Assessment, Summary Note March 29, 2024. https://thedocs.worldbank.org/en/doc/14e309cd34e04e40b90eb19afa7b5d15-0280012024/original/Gaza-Interim-Damage-Assessment-032924-Final.pdf

²³ Amnesty International. (2024, September 5). Israel/OPT: Israeli military must be investigated for war crime of wanton destruction in Gaza – new investigation.

Since October 2023, Israel has also escalated major military operations in the West Bank, targeting Palestinian cities and towns including Jenin, Tubas, Tulkarem, Qabatiya, Hebron, and Nablus through raids carried out by hundreds of soldiers and supported by fighter jets, drones, and bulldozers.²⁴ An Israeli incursion into Ienin that lasted ten days between August 28 and September 6, 2024 left mass destruction in its wake. Since October 2023, Israel has destroyed seventy percent of the infrastructure and streets in the city of Jenin in the northern West Bank, using armored bulldozers to raze streets, including over twelve miles of water and sewage pipelines, electrical and communication cables, and sidewalks, shops, and stalls in Jenin's market.²⁵-Israeli settlers have taken advantage of the war on Gaza to carry out more widespread and more destructive attacks on Palestinians in the West Bank.²⁶ The settlers are armed and supported by powerful allies in the Israeli government, led by Itamar Ben Gvir, the minister for national security and settler leader Bezalel Smotrich, the finance minister who also has security responsibilities in the West Bank and who has called for a West Bank village to be wiped out.²⁷ In December 2023, Mr. Smotrich procured more than \$100 million for the settlers, for whom 2023 was also the year with the highest number of settlement plans and tenders advanced by Israel since 2012.28

²⁴ A September 2024 UN Press Release reported that "Increasingly loud calls by Israeli leaders for turning the towns in the West Bank and refugee camps into a mini-Gaza", are translating into military operations that are causing heavy death tolls and widespread destruction to the West Bank s urban areas." United Nations Human Rights Office of the High Commissioner. (2024, September 2). Apartheid Israel is targeting Gaza and the West Bank simultaneously, says expert. https://www.ohchr.org/en/press-releases/2024/09/apartheid-israel-targeting-gaza-and-west-bank-simultaneously-says-expert

²⁵ The director of public relations at Jenin Municipality, Bashir Matahen, issued a statement describing the destruction on August 30, 2024. Awad, R. (2024, September 1). Israel Destroyed 70% of Jenin's Streets, Infrastructure, says Municipality. Anadolu Ajansi. https://www.aa.com.tr/en/middle-east/israel-destroyed-70-of-jenins-streets-infrastructure-says-municipality/3318166#. Jenin's governor Kamal Abu al-Rub reported to *The New York Times* that "we watched their bulldozers tear up streets, demolish businesses, pharmacies, schools. They even bulldozed the town soccer field, and a tree in the middle of a road." Solomon, E.; Leatherby, L.; Toler, A. (2024, September 25). Israeli Bulldozers Flatten Mile after Mile in the West Bank. The New York Times. https://www.nytimes.com/2024/09/25/world/middleeast/west-bank-raids.html. On September 3, 2024, UNRWA Commissioner-General Philippe Lazzarini stated on the platform X that Jenin had "been ravaged by violence + destruction. This is causing loss of life and injuries, including among civilians + severe damage to infrastructure." United Nations relief and works agency for Palestine refugees in the near east. UNWRA. (2024, September 3). For More Than Six Days Now, #Jenin Has Been Ravaged By Violence + Destruction. https://www.unrwa.org/newsroom/official-statements/more-six-days-now-jenin-has-been-ravaged-violence-destruction

²⁶ Settlers cannot be cleanly separated from the Israeli government, which receives funding from the U.S. Settlers also receive support both from non-governmental entities in the U.S. and from the Israeli government, including significant material support.

²⁷ United Nations General Assembly. (2023, November 6). Speakers Voice Alarm at Rising Gaza Death Toll, West Bank Settler Violence as Fourth Committee Debates Israeli Practices in Occupied Lands. https://press.un.org/en/2023/gaspd796.doc.htm

²⁸ European Union, Office of the European Union Representative (West Bank and Gaza Strip, UNRWA). (2024, August 2). 2023 Report on Israeli Settlements in the West Bank, including East Jerusalem, Reporting Period January-December 2023. https://www.un.org/unispal/wp-content/uploads/2024/08/One-Year-Report-on-Israeli-Settlements-in-the-occupied-West-Bank-including-East-Jerusalem-Reporting-period-January-December-2023.pdf. Bowen, J. (2023, December 6). Israeli settler violence brings destruction and fear to West Bank as war rages. BBC News. https://www.bbc.com/news/world-middle-east-67617920

At a Glance: Causal Pathways to Indirect Deaths in Gaza

- An estimated 90 percent of Gaza's population (over 1.9 million people) have been displaced and are living in temporary shelters, without cash to purchase basic necessities like food, clean water, and medicine.
- 96 percent of Gaza's population faces acute levels of food insecurity, with 2.15 million people in crisis levels of hunger or worse.
- The amount of water available in Gaza is reduced by 94% to 4.74 liters a day per person just under a third of the recommended minimum in emergencies and less than a single toilet flush.
- As of May, only 4 of Gaza's 36 hospitals had not been damaged, destroyed, or raided.²⁹ More than 880 healthcare workers have been killed.
- No electricity flows to Gaza's electric grid.
- Israel's government has limited humanitarian aid convoys entering Gaza, thereby limiting the amount of food and other critical supplies that enters. Between October 7, 2023 and February 2024, roughly "5,300 food trucks reached Gaza compared to the 17,400-20,880 that would have entered during a comparable pre-war period." 30

As a result, disease, infection, starvation, and death are at catastrophically high rates for the people living in Gaza.

This report covers three main pathways to indirect deaths among Palestinians: 1) economic collapse and food insecurity, 2) public services and health infrastructure destruction, and 3) environmental contamination.

Economic Collapse and Food Insecurity

Gaza

The Israeli government's operations in Gaza have brought about economic collapse and extreme food insecurity for the territory's 2.23 million Palestinians. An estimated 90 percent of Gaza's population (over 1.9 million people) has been displaced and are living in temporary shelters such as United Nations Relief and Works Agency (UNRWA) schools, government shelters, and tents. Displacement has been rapid and chaotic, and tens of thousands of people have been displaced multiple times. There have been days since October 7, 2023, when Israeli military violence has displaced as many as 150,000 people in

²⁹ Vinall, F. and El Chana, M. (2024, May 21). Mapping the damage to Gaza's hospitals: Battered, abandoned and raided. The Washington Post. https://www.washingtonpost.com/world/2024/05/21/gaza-hospitals-attacks-bombed-israel-war/.

³⁰ Jamaluddine, Z. et al. Crisis in Gaza. (2024). P. 23.; IPC. Integrated Food Security Phase Classification (IPC). (2023, December 21). Gaza Strip: Famine Review of the IPC Analysis. https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Famine_Review_Report_Gaza.pdf

the course of hours. As of May 2024, 179,000 of 470,000 housing units were left standing in Gaza.

Bombings have also destroyed the structures that house businesses, banks, and educational institutions, as well as telecommunications, roads, and electricity generation and conveyance infrastructures critical to economic functioning. As of January 31, 2024, 201,000 people had lost their jobs in Gaza, accounting for roughly two-thirds of the total workforce in the territory.³¹ Without employment a year into the war, people in Gaza lack the cash to purchase basic necessities like food, clean water, and medicine.³²

The thousands of direct deaths of family caregivers in this war have had ripple effects, making women, children, and infants particularly vulnerable to war-induced poverty, food insecurity, and the indirect death related to those conditions. Within the first three months of the war, an estimated 17,000 to 18,000 children had lost one or both of their parents, and UN Women estimated that two mothers were being killed every hour in Gaza.³³ Over 450,000 children's family homes had been damaged or destroyed.³⁴ Middle East households headed by widows tend to be particularly impoverished.³⁵ As of January 2023, the UN reported that more than 3,000 women had been widowed in Gaza.³⁶ Days after October 7th, 2023, Israel revoked the work permits (which permit travel) for roughly 20,000 Palestinians from Gaza who had been working inside Israel before the war. This left those workers, many of them men supporting families, trapped inside Israel and unable to return home. Thousands subsequently went missing and were held at Israeli detention facilities, thousands were deported to the West Bank, and at least 1,000 remained missing

³¹ UN News, Global Perspectives. (2024, March 19). Gaza: Increasing numbers of newborns on brink of death, agencies warn. https://news.un.org/en/story/2024/03/1147711. These numbers are drawn from estimates produced by the UN International Labor Organization in March 2024. Palestinian unemployment rate set to soar to 57 per cent during first quarter of 2024. https://www.ilo.org/resource/news/palestinian-unemployment-rate-set-soar-57-cent-during-first-quarter-2024.

³² A UN Conference on Trade and Development estimates that it could take up to 70 years to restore GDP levels in Gaza to its 2022 levels, which were themselves direly low. UN Trade and Development. (2024, January). Preliminary Assessment of the Economic Impact of the Destruction in Gaza and Prospects for Economic Recovery. https://unctad.org/publication/preliminary-assessment-economic-impact-destruction-gaza-and-prospects-economic-recovery. Israel has constricted Gaza s economy since at least 1991 when it blockaded the territory after twenty-four years of occupation.

³³ UN Women. (2024, January 19). Press release: Two mothers are killed in Gaza every hour as fighting exceeds 100 days. https://www.unwomen.org/en/news-stories/press-release/2024/01/press-release-two-mothers-are-killed-in-gaza-every-hour-as-fighting-exceeds-100-days

³⁴ Monitor E-MHR. (2023, November 11). Israel s War on the Gaza Strip has affected half a million children so far. Euro-Med Human Rights Monitor. https://euromedmonitor.org/en/article/5933/Israel%E2%80%99s-war-on-the-Gaza-Strip-has-affected-half-a-million-children-so-far. See also Jamaluddine et al. (2024). Crisis in Gaza. P. 34

³⁵ Savell, S. (2023, May 15). How Death Outlives War: The Reverberating Impacts of the Post-9/11 Wars on Human Health. Costs of War, Watson Institute, Brown University. P. 14. https://watson.brown.edu/costsofwar/papers/2023/IndirectDeaths

³⁶ UN Women. (2024, January 19). Press release.

as of May 1, 2024.³⁷ These forced disappearances of family breadwinners have a similarly devastating effect on the women and children who depend on them.

The direct and indirect death of mothers has especially severe consequences for the survival, health and well-being of infants and young children. Most of the upwards of 52,000 women who were pregnant in Gaza as of January 2024 have given birth outside of medical facilities, including in tents and even on the streets.³⁸ Premature births increased by up to one third in the first month of the war alone.³⁹ The nutritional well-being of neonates and infants, whose health depends heavily on breastfeeding, is at particular risk. Children between the ages of 6 to 59 months especially "face a dire nutritional emergency."40 Stress and privacy issues faced by mothers in war zones are known to severely disrupt breastfeeding practices⁴¹ and "push families towards formula feeding, which, if this occurs under suboptimal WASH [water, sanitation, and hygiene] conditions, risks contamination and subsequent infection...Food insecurity and war also increase rates of pre-term and small for gestational age babies, who also face feeding challenges."42 Before October 7, 58 percent of infants under six months were already formula-dependent.⁴³ Only an estimated 5 to 15 percent of infants are being exclusively breast-fed. 44 On April 2, 2024, World Health Organization spokesperson Margaret Harris cited Palestinian medics in reporting a "rise in children born with low birth weight, and just not surviving the neonatal period" as a result. Dr. Harris added that at Kamal Adwan, the only pediatric hospital in northern Gaza, "at least 15 malnourished children are coming in per day, and the needs are just getting ever more severe."45 By the same month, staff members at Emirati Hospital reported that they were no longer seeing "normal sized babies" and increased rates of

³⁷ Addameer. (Prisoner Support and Human Rights Association). (2024, May 1). On International Workers' Day. https://www.addameer.org/news/5335. See also Amnesty International. (2023, November 8). Israel/OPT: Horrifying cases of torture and degrading treatment of Palestinian detainees amid spike in arbitrary arrests. https://www.amnesty.org/en/latest/news/2023/11/israel-opt-horrifying-cases-of-torture-and-degrading-treatment-of-palestinian-detainees-amid-spike-in-arbitrary-arrests/">https://www.amnesty.org/en/latest/news/2023/11/israel-opt-horrifying-cases-of-torture-and-degrading-treatment-of-palestinian-detainees-amid-spike-in-arbitrary-arrests/; Shezaf, H and Maanit, C. (2023, October 26). Gazan Workers Describe Inhuman Treatment at Israeli Detention Centers Since Outbreak of War. Ha'aretz. <a href="https://www.haaretz.com/israel-news/2023-10-26/ty-article/.premium/gazan-workers-describe-inhuman-treatment-at-israeli-detention-facilities-since-war-started/0000018b-6631-d473-a5fb-66f9fa930000

³⁸ Loveluck, L.; Farouk Mahfouz, H.; Harb, H. (2024, January 21). War in Gaza is making childbirth a nightmare. The Washington Post. https://www.washingtonpost.com/world/2024/01/21/gaza-childbirth/
³⁹ Oxfam. (2023, November 23). Babies dying from preventable causes in besieged Gaza – Oxfam. https://www.oxfam.org/en/press-releases/babies-dying-preventable-causes-besieged-gaza-oxfam
⁴⁰ Jamaluddine et al. (2024). Crisis in Gaza. P. 36.

⁴¹ Corley, A. G. (2021, June). Linking armed conflict to malnutrition during pregnancy, breastfeeding, and childhood. Global Food Security. 29:100531.

⁴² Jamaluddine et al. (2024) Crisis in Gaza. P. 36.; Keasley, J.; Blickwedel, J.; Quenby, S. (2017). Adverse effects of exposure to armed conflict on pregnancy: a systematic review. BMJ Glob Health. 2:4.

⁴³ Jamaluddine et al. (2024). Crisis in Gaza. P. 24.

⁴⁴ Jamaluddine et al. (2024). Crisis in Gaza. P. 24, under the "escalation" scenario, which has occurred.

⁴⁵ AFP News. (2024, April 2). WHO Reports Sharp Rise In Newborn Deaths In Gaza. via Barron's, https://www.barrons.com/news/who-reports-sharp-rise-in-newborn-deaths-in-gaza-4b3812e1.

still births and neonatal deaths. 46 By April, there was a threefold increase in miscarriage rates in Gaza. 47

In September 2024, the World Food Programme reported that 96 percent of Gaza's population faced acute levels of food insecurity, with 2.15 million people in crisis levels of hunger or worse, among whom almost half a million are in catastrophic conditions. According to the UN's classifications, "catastrophic" or "famine" (IPC Phase 5) conditions are "the most severe phase of hunger. In June 2024, UNICEF reported that nine out of ten children in Gaza lacked the food they need. Very little food aid has been entering Gaza due to Israeli restrictions. The northern half of Gaza has been particularly hard hit. Anera reports that just four months into the war: "Some people are able to receive one meal a day through aid. They are the minority, however, and reports indicate that many are now grinding animal feed to make flour." World Health Organization (WHO) officials reported that every household in Gaza was skipping meals due to food shortages and that adults were not eating to allow children to eat. United to the properties of the percentage of the properties of the properties of the properties.

⁴⁶ Dominic Allen, the designated representative for Palestinian territories with the United Nations Population Fund (UNFPA), reported these findings after he visited Gaza in March 2024. Da Silva, C. (2024, April 2). 'I kept on saying goodbye': Gaza hospital reports rise in stillbirths and neonatal deaths. NBC News. https://www.nbcnews.com/news/world/gaza-hospital-stillbirths-neonatal-deaths-rcna145582.

⁴⁷ International Rescue Committee. (2024, April 2). Pregnant women and mothers in Gaza are fighting to keep themselves and their babies alive amidst healthcare collapse, the IRC warns. https://www.rescue.org/press-release/pregnant-women-and-mothers-gaza-are-fighting-keep-themselves-and-their-babies-alive

⁴⁸ World Food Programme. Emergency: State of Palestine. https://www.wfp.org/emergencies/palestine-emergency. In May 2024, fifteen humanitarian aid organizations issued an IPC report classifying Gaza, as a whole, in Emergency (IPC Phase 4). IPC. (2024, June 25). Gaza Strip: Acute Food Insecurity Situation for 1 May - 15 June and Projection for 16 June - 30 September 2024. https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1157065/. Similar warnings have been issued over the past several months, including by the World Health Organization, UNICEF, USAID, Human Rights Watch, The Global Nutrition Cluster, and the Israeli human rights organization B'Tselem.

⁴⁹ The definition "means a complete lack of access to food and other basic needs. Families face an extreme lack of food and other basic needs even after all possible coping mechanisms have been put in place. Starvation, death, destitution and extremely critical levels of acute malnutrition are evident. At least two out of every 10,000 people die of starvation or disease in famine conditions. More than 30 percent of the population is acutely malnourished and there is total loss of income. People just have access to one or two food groups and there is an extreme shortage of calories per person, per day. Twenty percent of families face extreme food shortages." World Food Programme. (2024, March 18). The 5 steps from food security to famine. https://www.wfp.org/stories/5-steps-food-security-famine

⁵⁰ UNICEF finds 90% of Gazan children lack food needed for proper growth. (2024, June 5). Reuters. https://www.reuters.com/world/middle-east/unicef-finds-90-gazan-children-lack-food-needed-proper-growth-2024-06-06/

⁵¹ Anera. (2024, February 5). Food Production Systems Under Attack in Gaza. https://www.anera.org/blog/food-production-systems-under-attack-in-gaza/

⁵² B'Tselem. (2024, April). Manufacturing Famine: Israel is Committing the War Crime of Starvation in the Gaza Strip. P. 3.

https://www.btselem.org/sites/default/files/publications/202404_manufacturing_famine_eng.pdf

were children, had died from malnutrition since October 7.⁵³ The United Nations Office for the Coordination of Humanitarian Affairs Occupied Palestinian territory (OCHA) reported that up to 16 percent of children under age two in northern Gaza were suffering severe malnutrition.⁵⁴ An emergency medical team from several international aid organizations has "reported patients dying of infections due to acute malnutrition."⁵⁵ Wounded children with no surviving family (WCNSF, a new acronym coined by medical teams in the Gaza Strip) are among the most vulnerable individuals in the war. "Wasting," which means not getting enough food, literally wasting to skin and bones, puts children especially at greater risk of death especially from infections that result from weakened immune systems.⁵⁶ Widespread famine has also made it difficult for the well over 94,000 injured Palestinians to heal from their injuries.⁵⁷

Hunger and malnutrition result from Israel having destroyed or damaged the infrastructure that provide residents of Gaza with food, including bakeries and food shops, farmland, irrigation works, artisanal fishing boats and fishing equipment, and over half of tree crops and greenhouses. United Nations reports⁵⁸ and UN Food and Agriculture Organization data indicated that as of May 2024 Israel had blocked access to farmland and the sea, damaged over 57% of Gaza's cropland (with a 33% increase since January), destroyed over 70% of Gaza's fishing fleet, and damaged more than 46% of Gaza's agricultural wells and 33% of Gaza's greenhouses.⁵⁹ What olive groves remained could not be harvested during the fall harvesting season because of constant Israeli bombardment, and access to olive groves promises to be even more difficult in fall of 2024. Greenhouses left standing are largely inaccessible. Livestock (e.g. chickens, cattle, sheep, goats) that have not been killed or injured in direct attacks have become emaciated or otherwise sick and

⁵³ UN Human Rights Office of the High Commissioner. (2024, July 9). Experts Declare Famine has Spread throughout Gaza Strip. https://www.ohchr.org/en/press-releases/2024/07/un-experts-declare-famine-has-spread-throughout-gaza-strip

⁵⁴ The World Health Organization defines malnutrition as "deficiencies or excesses in nutrient intake, imbalance of essential nutrients or impaired nutrient utilization. The double burden of malnutrition consists of both undernutrition and overweight and obesity, as well as diet-related noncommunicable diseases. Undernutrition manifests in four broad forms: wasting, stunting, underweight, and micronutrient deficiencies. World Health Organization. Malnutrition. n.d. https://www.who.int/health-topics/malnutrition#tab=tab 1 (accessed 2024, October 3).

⁵⁵ B'Tselem. (2024, April). Manufacturing Famine: Israel is Committing the War Crime of Starvation in the Gaza Strip. P. 4.

https://www.btselem.org/sites/default/files/publications/202404_manufacturing_famine_eng.pdf ⁵⁶ Savell, S. (2023). P. 11.

⁵⁷ This figure was as of September 11, 2024. Doctors without Borders. How we are Responding to the War in Gaza. https://www.doctorswithoutborders.org/latest/our-response-israel-gaza-war

⁵⁸ UN Human Rights Office of the High Commissioner. (2024, January 16). Over one hundred days into the war, Israel destroying Gaza s food system and weaponizing food, say UN human rights experts. https://www.ohchr.org/en/press-releases/2024/01/over-one-hundred-days-war-israel-destroying-gazas-food-system-and

⁵⁹ Food and Agriculture Organization of the United Nations. (2024, June 26). FAO sounds alarm over high risk of famine across the whole Gaza Strip amidst humanitarian access constraints. https://www.fao.org/newsroom/detail/fao-sounds-alarm-over-high-risk-of-famine-across-the-whole-gaza-strip-amidst-humanitarian-access-constraints/en (accessed 3 October 2024).

unable to provide food. Animal fodder has also been destroyed, depleted, or used as human food. Anera reported in February 2024 that "any food that does remain in Gaza is inaccessible due the fighting and infrastructure damage. Stores, if they remain standing, are totally depleted," for rendering most of the population dependent on the humanitarian food aid that has not been able to reach most people in need.

Israeli military operations have also targeted humanitarian aid storage areas, convoys, staff, roadways, and foodstuffs. For example, in April an Israeli airstrike hit a World Central Kitchen (WCK) convoy headed to deliver humanitarian aid in Gaza, killing seven aid workers. This led WCK, which had been a critical agency delivering aid since October, to halt operations in Gaza, only recently resuming them. Several other aid agencies also suspended operations following the attack. Israel's government has limited humanitarian aid convoys from entering Gaza, thereby limiting the amount of food and other critical supplies that enters the Strip. Between October 7, 2023 and February 2024, roughly "5,300 food trucks reached Gaza compared to the 17,400-20,880 that would have entered during a comparable pre-war period."

Destruction of transport infrastructure is a major factor in producing economic collapse and food insecurity. By January, Israel's government had destroyed or damaged two-thirds of all roads and 92 percent of primary roads along with numerous vehicles, impeding mobility for civilians as well as humanitarian aid convoys, access to food, relief aid, and other services, and family reunification that would allow people, and especially children, to draw on familial support to survive. Israeli attacks have also killed, injured, starved, and displaced animals (especially donkeys) that have for years been essential for moving people and goods throughout Gaza in light of Israeli restrictions on fuel and high poverty levels resulting from Israeli policies, including heavy restrictions on the movement of goods and people and recurring military attacks. Aerial bombardments and other Israeli military operations have targeted vast swaths of Gaza's underground tunnel system, a system that had previously been a critical supplement mode for conveying food into the besieged territory.⁶²

The destruction of infrastructures has also led to severe water shortages. Even before the current war, the baseline of consumable water was very low: a UNDP report in 2020 had found that at the time, over 92% of water in the Gaza Strip was unfit for human consumption. The Israeli government's war on Gaza since October 7, 2023 has further limited access to clean water. In July 2024, Oxfam reported that the Israeli government had damaged or destroyed five water and sanitation sites every three days since the start of

⁶⁰ Anera. (2024, February 5). Food Production Systems Under Attack in Gaza. https://www.anera.org/blog/food-production-systems-under-attack-in-gaza/#:~:text="">:text="">(accessed 3 October 2024).

⁶¹ Jamaluddine et al. (2024). Crisis in Gaza. P. 23; Integrated Food Security Phase Classification (IPC). Gaza Strip: Famine Review of the IPC Analysis, 2023.

⁶² See for example, Israel admits to flooding Gaza tunnels in bid to 'neutralise' Hamas. (2024, January 30). France24. https://www.france24.com/en/middle-east/20240130-%F0%9F%94%B4-live-qatar-says-truce-proposal-will-be-sent-to-hamas

this war.⁶³ Oxfam found that the Israeli government has "reduced the amount of water available in Gaza by 94% to 4.74 liters a day per person – just under a third of the recommended minimum in emergencies and less than a single toilet flush." As of February, health and hygiene researchers estimated that people in Gaza had access to just 0-0.6 liters per person per day of water in some shelters.⁶⁴ In addition to the dire health consequences from thirst and disease, lack of clean water to prepare food further exacerbates food insecurity.

Israeli military obstruction of movement through new construction by the Israeli military further contributes to food insecurity and economic collapse. Between October and March, Israel completed construction and controls crossing of a military road bisecting northern Gaza east to west.⁶⁵ In bisecting the strip into northern and southern parts, Highway 749 obstructs not only the flow of food and essential aid to those remaining under conditions of famine in the north, but also the return north of over seventy-five percent of Palestinians who have been displaced south of Wadi Gaza since October. Construction of the road also brought destruction of at least 750 Palestinian buildings, including a university, for five hundred yards on either side of it.

West Bank

Palestinians in the West Bank face the threat of economic collapse and food insecurity as well. Violence by the Israeli military and military-backed settlers has displaced and demolished the homes and infrastructures of employment for thousands of residents there. By September 2, 2024, the UN estimated that 3,300 Palestinians outside of Gaza had been displaced since October 7, 2023. Additionally, the military's arrest of an

⁶³ Oxfam. (2024, July). Water War Crimes: How Israel has Weaponized Water in its Military Campaign in Gaza. https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1

⁶⁴ Jamaluddine et al. (2024). Crisis in Gaza. P. 16.

⁶⁵ The new road was nicknamed the Netzarim Corridor" after the Jewish-only Netzarim settlement, which was removed from Gaza in 2005, and has been given the official highway number 749" to integrate it into the national Israeli highway system.

⁶⁶ On Wednesday, August 28, 2024, for example, Israel ordered the evacuation of Nur Shams refugee camp in Tulkarem in the middle of the night, giving the camps over 13,500 residents four hours to leave their homes and setting up a checkpoint in the camp's Maslakh neighborhood to check people as they were leaving. Abu Samar, Q. (2024, August 28). Israeli army orders Palestinians to vacate Nour Shams camp in West Bank in 4 hours. Anadolu Ajansi, https://www.aa.com.tr/en/middle-east/israeli-army-orders-palestinians-to-vacate-nour-shams-camp-in-west-bank-in-4-hours/3315227

⁶⁷ United Nations Human Rights Office of the High Commissioner. (2024, September 2). Apartheid Israel is targeting Gaza and the West Bank simultaneously, says expert. https://www.ohchr.org/en/press-releases/2024/09/apartheid-israel-targeting-gaza-and-west-bank-simultaneously-says-expert; OCHA. (2024, September 5). Data on demolition and displacement in the West Bank. https://www.ochaopt.org/data/demolition.

estimated 10,300 West Bank Palestinians has removed thousands of breadwinners from their sources of employment and from their families.⁶⁸

The United Nations Office for the Coordination of Humanitarian Affairs estimated that in 2024 alone, Israel's government had destroyed 1,054 structures that were homes, livelihood-related, service-related or part of health infrastructure in the West Bank and East Jerusalem.⁶⁹

All these numbers are changing, because this is an evolving situation.

Jenin in Focus

In the northernmost West Bank city of Jenin, the Israeli army launched an incursion in late August/early September 2024 at a scale the city had not seen in two decades. Several days in, Jenin's governor Kamal Abu al-Rub announced that 4,000 Jenin residents were forcibly removed from their homes at gunpoint. He stated: "The Israeli army is preventing food, water, ambulances, and journalists from reaching these besieged areas.... We are getting lots of calls for help." On September 3, 2024, Jenin's mayor Nidal al-Obaidi declared the city a "disaster area" as Israeli military operations continued there for a second week. Water was cut off from 80 percent of the city's homes. The mayor estimated that Israel's latest operation, which had ripped into roads to a depth of 3.2-4.9 feet, would cost the city the equivalent of \$13.5 million USD. He added, "Our losses are estimated at around [\$27 million USD] since Oct. 7, 2023." According to the mayor, by September 4,

⁶⁸ As of March 2024, B'Tselem estimated that 1,123 Palestinians had been displaced from their homes at the hands of the Israeli military and military-backed settlers. These included 168 families and 436 children who were members of 19 isolated Palestinian communities and single-farm families. B'Tselem. (2024, August 24). Isolated Palestinian communities and single-farm families forcibly transferred.

https://www.btselem.org/settler violence/20231019 forcible transfer of isolated communities and familie s in area c under the cover of gaza fighting

⁶⁹ United Nations Human Rights Office of the High Commissioner. (2024, September 2). Apartheid Israel is targeting Gaza and the West Bank simultaneously, says expert. https://www.ohchr.org/en/press-releases/2024/09/apartheid-israel-targeting-gaza-and-west-bank-simultaneously-says-expert; OCHA. (2024, September 5). Data on demolition and displacement in the West Bank.

https://www.ochaopt.org/data/demolition See more, Sawafta, A. (2024, September 6). Israeli forces pull out of Jenin leaving a trail pf destruction. Reuters. https://www.reuters.com/world/middle-east/israeli-forces-withdraw-jenin-its-camp-palestine-news-agency-says-2024-09-06/

⁷⁰ Headlines from September 5, 2024. Democracy Now!

https://www.democracynow.org/2024/9/5/headlines/afd_becomes_first_far_right_party_to_win_german_st_ate_election_since_nazis/load_more; See also, Sawafta, A. (2024, September 6). Israeli forces pull out of Jenin leaving a trail pf destruction. Reuters. https://www.reuters.com/world/middle-east/israeli-forces-withdraw-jenin-its-camp-palestine-news-agency-says-2024-09-06/

⁷¹ Solomon, E.; Leatherby, L.; Toler, A. (2024, September 25). Israeli Bulldozers Flatten Mile after Mile in the West Bank. The New York Times. https://www.nytimes.com/2024/09/25/world/middleeast/west-bank-raids.html

⁷² The mayor spoke to Anadolu Agency. Abu Samra, Q. (2024, September 4). West Bank city declared disaster area amid Israeli military operation. Anadolu Agency. https://www.aa.com.tr/en/middle-east/west-bank-city-declared-disaster-area-amid-israeli-military-operation/3320877

"The commercial square area, which is considered the heart of Jenin, ha[d] been completely destroyed and shopping ha[d] completely stopped. Many shops ha[d] been demolished, bulldozed and burned amid a severe shortage of food and medicine."

The UN Human Rights Office reported that in Jenin, an 83-year-old man, Tawfiq Ahmad Younis Qandil, was killed on August 30, 2024. "According to his family, he had gone out of his house in the eastern neighborhood of Jenin to get groceries, and was riddled with bullets, allegedly by Israeli snipers, the moment he stepped outside. His family reported that they were prevented from reaching him for two hours as Israeli forces fired on anything moving in the area." Residents of the camp, paramedics and UN workers reported that many families remained trapped in their homes without food or water.

This was not the first Israeli attack on Jenin. In July, al-Obaidi told Reuters that Israeli raids since October 2023 had inflicted great damage on essential infrastructure, estimating it would cost \$15 million USD just to repair Jenin's refugee camp, the cramped home of under a quarter square mile for 11,000 to 14,000 Palestinian residents. He explained that since the West Bank Palestinian Authority was "under siege," resources were hard to come by.⁷⁴

Hundreds of thousands of West Bank Palestinians have lost access to their sources of livelihood. The UN International Labor Organization (ILO) found that as of the end of January 2024, West Bank Palestinians had lost 306,000 jobs there, or one-third of total employment. The UN World Food Program found that "a staggering number of workers" have lost their jobs, businesses have been forced to close or downsize, and the Palestinian Authority faces "a funding shortfall, impacting the salaries of civil servants." Thousands also lost the Israeli work permits required for them to enter Israel for employment and are unable to leave the West Bank, and commercial activity inside the West Bank has been severely limited.

The UN World Food Program also found that the Israeli military's increased military presence in the West Bank since October 7, 2023 has resulted "in the imposition of movement restrictions and the establishment of additional checkpoints, severely limiting the movement of the people." Restrictions on movement lend themselves both to food insecurity and to economic hardship, for example as movement to obtain food in the West

⁷³ UN. (2024, August 31). UN Human Rights in Occupied Palestinian Territory: OHCHR calls for the end of militarized operations in Jenin. https://www.un.org/unispal/document/ohchr-statement-31aug24/
⁷⁴ Sawafta, A. (2024, July 19). Squeezed by Israel, Palestinian Authority's role fades in West Bank. Reuters.

⁷⁴ Sawafta, A. (2024, July 19). Squeezed by Israel, Palestinian Authority's role fades in West Bank. Reuters. https://www.reuters.com/world/middle-east/squeezed-by-israel-palestinian-authoritys-role-fades-west-bank-2024-07-17/

⁷⁵ UN International Labor Organization. (2024, March 18). ILO Assessment: Palestinian unemployment rate set to soar to 57 per cent during first quarter of 2024. https://www.ilo.org/resource/news/palestinian-unemployment-rate-set-soar-57-cent-during-first-quarter-2024

⁷⁶ UN and World Food Programme. (2024, February 13). WFP / West Bank Hunger Surge. https://media.un.org/unifeed/en/asset/d317/d3172904

Bank has become dangerous for thousands of Palestinians in the face of Israeli military sieges of towns, military attacks on roads at checkpoints, and settler attacks on Palestinian civilians on roads and on agricultural lands. Preliminary assessments from UN Food Security Sector partners found that "food insecurity in the West Bank has risen from 350,000 (approx. 10 percent of the population) to an estimated 600,000 people since the Gaza crisis. It is expected to increase further in the coming months. At the time, the highest number of people facing food insecurity were in Nablus and Hebron."⁷⁷

Israeli military operations and military-backed settler violence have destroyed, damaged, occupied, and blocked access to farmland, pastures, olive and fruit trees, orchards, and livestock. They have displaced people off of and away from lands and livestock. This has prevented people from accessing crops, from cultivating their lands, and it has obstructed the supply chains that bring agricultural products to markets and therefore to Palestinian consumers. For example, Tzon Kedar is an Israeli settlement outpost established in September 2019 in Barivet a-Sawahrah a-Sharqiyah, pastureland east of the town of the same name in al-Quds District. Following its establishment, settlers, sometimes escorted by Israeli soldiers, began harassing Palestinian residents, invading their lands, damaging fences and crops, and preventing residents from accessing their pastures. After October 7, 2023, the Israeli human rights organization B'Tselem reported that "settlers blocked the road leading from the town to the residents 'farmland and pastureland by putting up a dirt pile and concrete blocks, escorted by soldiers. This also blocked Palestinians from the town who live on their farmland and residents of al-Muntar from reaching the town for various services. At the same time, the settlers intensified their harassment of the farmers, threatening to hurt them if they did not leave the area, and preventing them from accessing pastureland or repairing their water wells."78

Public Services and Health Infrastructure Destruction

Gaza

The number of indirect deaths resulting from Israel's destruction of public services and health infrastructures, which include medical facilities and supplies, homes, water, sanitation, road, and electricity infrastructures is catastrophic and far exceeds the direct death toll. Gaza's healthcare system has, in the words of Doctors without Borders, been "systematically dismantled." As of May, only four of Gaza's 36 hospitals had not been

⁷⁷ UN and World Food Programme. (2024, February 13). West Bank Hunger Surge. https://media.un.org/unifeed/en/asset/d317/d3172904

⁷⁸ B'Tselem. (2024, September 4). Tzon Kedar outpost: Settler takeover of a-Sawahrah a-Sharqiyah land backed by military.

https://www.btselem.org/settler_violence/20240904_tzon_kedar_outpost_settler_takeover_of_a_sawahrah_a_sharqiyah_land_backed_by_military

⁷⁹ Doctors without Borders. (2024, May 29). Strikes, raids and incursions: Seven months of relentless attacks on healthcare in Palestine. https://www.doctorswithoutborders.ca/strikes-raids-and-incursions-seven-months-of-relentless-attacks-on-healthcare-in-palestine/

damaged, destroyed, or raided.⁸⁰ More than 880 healthcare workers have been killed, including six Doctors without Borders staff members. Israeli military operations have obstructed safe passage corridors for civilians to enter and exit hospitals. Israeli soldiers have threatened healthcare workers, forced them to flee, or kidnapped, tortured, injured, and killed them. The Israeli military has repeatedly ordered hospitals to be evacuated. Medical training for Palestinian doctors and nurses in Gaza has been disrupted and all of Gaza's universities have been destroyed. The dwindling healthcare workforce is stressed, working without pay, and performing tasks beyond their training. The hospitals that are still partially functioning have been overwhelmed by the large trauma injury caseload. And Israeli military bombardments have destroyed or rendered inaccessible medical facilities for individuals to receive longer term care (e.g. rehabilitation, prostheses and physical and occupational therapy) for severe and debilitating injuries, previously existing illnesses, and mental health conditions.

Most people in Gaza lack the resources to pay the exorbitant cost of being smuggled out of the Strip into Egypt for life-saving medical treatments or to escape the violence. As of April 2024, only about 4,000 patients—just a fraction of those needing care—had been able to leave through the Rafah crossing to seek medical attention in Egypt.⁸¹

No electricity flows to Gaza's electric grid. On October 7, Israel shut off the ten power lines that once sent 120 megawatts to the grid. On October 11, Gaza's only power plant ran out of fuel. As of January, Israel had destroyed 61.5 percent of Gaza's power grid. Before October 2023 residents of Gaza had developed a system of solar power generation, especially on rooftops. Over fifty percent of businesses and homes in Gaza used solar energy in March 2023, though solar systems also required some energy from the grid. Israel has destroyed many of Gaza's solar systems, especially by bombing buildings.

Electricity shortages severely impair what few hospital operations are still possible as well as the water and sanitation systems that rely on the electrical system. Israel's government has destroyed power infrastructures needed to operate life-saving medical equipment. Shortages also make food preservation and preparation difficult and increase the likelihood of diseases and infections. Use of firewood and other forms of burning for food preparation as an alternative to electricity increase the risk of respiratory illnesses.⁸²

A London- and Baltimore-based public health team estimates that out of all traumatic injuries, some 22 to 27 percent resulted in immediate death from October 7 to

⁸⁰ Vinall, F. and El Chana, M. (2024, May 21). Mapping the damage to Gaza's hospitals: Battered, abandoned and raided. The Washington Post. https://www.washingtonpost.com/world/2024/05/21/gaza-hospitals-attacks-bombed-israel-war/

⁸¹ Primbault, Martin Dumas. (2024, April 2). In Egypt, the ordeal of wounded Gazans. LaCroix International. https://international.la-croix.com/world/gazas-wounded-in-egypt-face-a-journey-of-survival-and-uncertainty

⁸² UN Environment Programme. (2024, June 18). Environmental Impact of the Conflict in Gaza: Preliminary Assessment of Environmental Impacts. P. 22. https://www.unep.org/resources/report/environmental-impacts

May 2024.⁸³ The rest of the injuries could have been treated, leading to survival, if the necessary medical treatment were available. Without access to healthcare, increased indirect deaths also result from cancer, strokes, cardiac arrest, diabetes, and chronic kidney disease requiring hemodialysis.⁸⁴ As of January 2024, the World Health Organization reported that there were about 350,000 people living with chronic diseases such as cancer in the Gaza Strip.⁸⁵ As one example of the disruption to treatment, American doctors who served in Gaza report that cancer care has been entirely unavailable in Gaza since October 7, 2023.⁸⁶ Disrupted access to childbirth, antenatal, and postnatal services, and compromised quality of care along with the deterioration of water and sanitation infrastructures and increased food security also greatly increase the relative risk of maternal, neonatal, and stillbirth deaths. In Gaza there are reports of caesareans being conducted without anesthesia or adequate access to sterile medical instruments, for example.⁸⁷

An additional health hazard in Gaza stems from psychological trauma: in Gaza, children as young as five years old are telling humanitarian aid workers that they want to die, Doctors without Borders International Secretary General Christopher Lockyear told the UN's 15-member Security Council in February 2024.⁸⁸ There are no published statistics on suicide, but researchers estimate that "four out of five children in the Gaza Strip live with depression, grief, and fear as a result of fifteen years of blockade and previous military attacks," and that "cases of post-traumatic stress, anxiety, and severe depression are on the rise."

The Israeli military's destruction of roads that allow access to public services and health infrastructures has obstructed access to healthcare and exacerbated health crises, as has mass displacement. By destroying roads and transport infrastructure (e.g. vehicles, humanitarian convoys, and donkey carts), Israel has destroyed the means of distributing

⁸³ Jamaluddine et al. (2024). Crisis in Gaza. P. 21.

⁸⁴ Jamaluddine et al. (2024). Crisis in Gaza. P. 11.

⁸⁵ World Health Organization. (2024, January 22). *Health conditions in the occupied Palestinian territory, including east Jerusalem*. https://apps.who.int/gb/ebwha/pdf files/EB154/B154_51-en.pdf

⁸⁶ "Appendix to letter of October 2, 2024 re: American physicians observations from the Gaza Strip since October 7, 2023." (2024, October 2).

 $[\]frac{https://static1.squarespace.com/static/66e083452b3cbf4bbd719aa2/t/66fcd754b472610b6335d66f/1727846228615/Appendix+20241002.pdf}{20241002.pdf}$

⁸⁷ Jamaluddine et al (2024). Crisis in Gaza. P. 31.

⁸⁸ Nichols, M. (2024, February 22). MSF slams US on Gaza at UN, says children as young as 5 want to die. Reuters. https://www.reuters.com/world/middle-east/msf-slams-us-gaza-un-says-children-young-5-want-die-2024-02-22/

⁸⁹ Jamaluddine et al. (2024). Crisis in Gaza. P. 34. See also, Save the Children International. (2022, June 15). After 15 years of blockade, four out of five children in Gaza say they are living with depression, grief and fear. https://www.savethechildren.net/news/after-15-years-blockade-four-out-five-children-gaza-say-they-are-living-depression-grief-and; Project HOPE. (2024, January 4). Gaza: Profoundly Alarming" Mental Health and Medical Needs - occupied Palestinian territory. https://www.projecthope.org/gaza-profoundly-alarming-mental-health-and-medical-needs/

medical supplies and medical supplies themselves, disrupting critical supply chains for healthcare delivery.

Homes must be understood as another health infrastructure. At least three-quarters of Gaza's housing stock has been damaged or destroyed. Destruction of housing has made homes unsafe, exposing Palestinians to the elements, eliminating privacy, and increasing the risk of disease and infection. An estimated 90 percent of Gaza's population is living in shelters like tents that are neither winterized/heated nor built for cooling in high temperatures. Tents are hazardous shelters. Heavy rains flood them, forcing people to sleep in the mud or standing water. The hot summer sun turns tents into ovens, making it hard to breathe. Destruction of homes and displacement also lead to exposure to infection, pests, and diseases. As more people live in overcrowded "tent cities" far from access to clean water, sanitation facilities (e.g. toilets, showers, sewage networks), where people become obliged to engage in open defecation, for example, rates of infection and disease have risen sharply.⁹⁰

Destruction has followed Palestinians to their temporary shelters, including UN schools, hospitals, and tents. Israel had destroyed 50 United Nations Relief and Works Agency (UNRWA) shelters set up for up to 1.9 million displaced people as of May and the world witnessed the Rafah "tent massacre" that killed over 40 people under burning tarps that same month.

Water and sanitation infrastructure are critical to essential service provision and public health. As of January, Israel had already damaged or destroyed two-thirds of Gaza's water infrastructures and assets. These include desalination plants in northern and central Gaza, 162 water wells, and two of the three piped connections that conveyed water to Gaza through Mekorot, Israel's water company. Israel has destroyed or shut down all five of Gaza's wastewater treatment plants, including a German-funded treatment plant that had opened in April 2023.

As of March 2024, there was one shower per 3,600 people and one toilet per 850 people for over one million Palestinians crammed into Rafah, with humanitarian agencies warning that the humanitarian standard is one toilet for 20 people. 91 Oxfam reported in June that in al-Mawasi, which after the Israeli military instructed residents of Rafah to evacuate, became the most densely populated area on earth, there were "121 latrines for over 500,000 people – or 4,130 people having to share each toilet." 92

Israeli attacks have stopped approximately 65 sewage pumps from operating, and destroyed over 43 miles of Gaza's sewage networks. Raw wastewater, estimated to be over

 $^{^{\}rm 90}$ Jamaluddine et al. (2024). Crisis in Gaza. P. 16.

⁹¹ UNICEF. (2024, March 26). Gaza's Children: Trapped in a cycle of suffering. https://www.unicef.org/press-releases/gazas-children-trapped-cycle-suffering

⁹² Oxfam. (2024, June 4). Famine Risk Increases as Israel Makes Gaza Aid Response Virtually Impossible. https://www.oxfam.org.uk/mc/jkvh3d/

34 million gallons per day, flows openly onto Gaza Strip roads and into shelters for displaced people. Before October 2023, diarrhea cases in young children in Gaza averaged just 2,000 per month. Since October 7, 2023, sewage-contaminated water has led to extensive diarrhea, including bloody diarrhea, which affected 345,500 people in April, for example, including more than 100,000 children under age 5, according to the World Health Organization. Diarrhea accelerates dehydration and malnutrition. Diarrhea also increases the need for facilities like toilets and showers. Their absence increases the spread of bacteria that cause diarrhea.

An Oxfam analysis of WHO figures from February 2024 found that a lack of clean water and sanitation led to 26% of Gaza's population falling ill to easily preventable diseases. Only an estimated 10 to 30% of Gaza's population has access to soap. In September 2024 the WASH and Health Clusters of the World Health Organization estimated that "Gaza needs 5 million bars of soap and half a million bottles of shampoo and detergent each month," while there is "an alarming level due to a critical shortage of essential hygiene items such as soap, shampoo, and detergents. Families are struggling to maintain basic hygiene in overcrowded shelters, which increases the risk of communicable diseases like diarrhea, respiratory infections, and skin diseases such as scabies." Infants are particularly vulnerable: obstructions to keeping bottles, formula water, and teats sterile has increased incidence of diarrhea and other infectious diseases, which further exacerbate malnutrition in infants. A Global Nutrition Cluster report published in February on the war's first 120 days, found that at least 90 per cent of children under 5 were affected by one or more infectious disease, and that 70 percent had diarrhea in the past two weeks, a 23-fold increase compared with the 2022 baseline.

As of May 2024, the World Health Organization reported that since the war's beginning there had been nearly 800,000 acute respiratory infections, over 400,000 cases of diarrhea (with over 100,000 cases in children under 5), over 92,000 cases of scabies and lice, over 55,000 cases of skin rashes, 8,000 cases of chickenpox, and over 67,000 cases of

⁹³ Euro-Med Human Rights Monitor. (2024, July 5). Israel Uses Water as a Weapon of its Genocide in Gaza. https://euromedmonitor.org/en/article/6393/Israel-uses-water-as-a-weapon-of-its-genocide-in-Gaza

⁹⁴ Bouri, C. (2024, April 17). Gaza's Health Toll in Numbers. Think Global Health. https://www.thinkglobalhealth.org/article/gazas-health-toll-numbers#:~:text= The collapsed healthcare

https://www.thinkglobalhealth.org/article/gazas-health-toll-numbers#:~:text= The collapsed healthcare system averaged just 2,000 per month.

⁹⁵ Oxfam. (2024, July). Water War Crimes: How Israel has Weaponized Water in its Military Campaign in Gaza. P 7. https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf;jsessionid=1927D7255A5FA4A7FD55C4C877BA1515?sequence=1">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621609/bp-water-war-crimes-180724-en.pdf

 $^{^{96}}$ Jamaluddine et al. (2024). Crisis in Gaza. P. 16. According to the "escalation" scenario.

⁹⁷ World Health Organization Health Cluster. (2024, September 13). Urgent Hygiene Crisis: Combatting Diarrhea and Skin Infections in Gaza. https://healthcluster.who.int/publications/m/item/urgent-hygiene-crisis-combatting-diarrhea-and-skin-infections-in-gaza

acute jaundice syndrome.⁹⁹ Endemic diseases, particularly COVID-19, influenza and pneumococcal disease, all attributable to pathogens transmitted mainly through the airborne-droplet route, are projected by researchers at the London School of Hygiene and Tropical Medicine and at Johns Hopkins University to be the leading causes of infectious disease deaths, similar to the pre-war period. However, the researchers project that "[m]ortality from these diseases is mostly preventable but will increase considerably in the absence of adequate diagnosis, antibiotics, and respiratory support."¹⁰⁰

If epidemics also occur, as they are projected to do, those that are projected to cause the most excess deaths are cholera, polio (both wild-type and vaccine-derived), measles, and meningococcal meningitis. During the decade prior to October 7, there was an absence of large-scale epidemics in Gaza. The increased rates of death after October 7 from epidemic-prone infectious diseases like cholera (which had not occurred in Gaza since 1981), measles, typhoid, polio, and meningococcal meningitis due to inadequate sanitation, overcrowding, and a nutritional emergency, thus represent a new cause of indirect death in Gaza. As of January 2024, there were five suspected cases of measles in Gaza. However, there is no diagnostic testing available for cases with rash and fever, to exclude measles. 101 August 2024 saw the first confirmed polio case in Gaza in decades when a 10-month old unvaccinated baby developed paralysis in the lower left leg in Deir al-Balah. 102 If left untreated, cholera (which can kill within hours) has a 25 to 50% mortality rate, 103 measles¹⁰⁴ and polio¹⁰⁵ have an up to 15% fatality rate, and meningococcal meningitis can have a fatality rate of between 20 and 40 percent, or higher. Only an estimated 5 to 10 percent of infants are receiving their third doses of routine vaccinations. 106 Declining immunity due to vaccination disruptions increases deaths that could have been prevented through vaccination. 107

Over 1.7 million of Gaza's Palestinians live amidst heaps of refuse. Israel has destroyed at least five of Gaza's six disposal facilities as well as its medical waste treatment facilities and the administrative building, maintenance workshop, and storage rooms of the Joint Service Council for Solid Waste management. Israel has also destroyed the containers

⁹⁹ World Health Organization. (2024, May 18). oPt Emergency Situation Update. Issue 31:7 Oct 2023 - 18 May 2024. P. 2. https://www.emro.who.int/images/stories/Sitrep.pdf

¹⁰⁰ Jamaluddine et al. (2024). Crisis in Gaza. P. 37.

¹⁰¹ World Health Organization. (2024, May 2). Hostilities in the occupied Palestinian territory (oPt) Public Health Situation Analysis (PHSA). P. 11. https://www.un.org/unispal/wp-content/uploads/2024/05/WHO-PHSA-oPt-020524-FINAL.pdf

¹⁰² UN News. (2024, August 23). Gaza: First polio case confirmed in war-shattered enclave. https://news.un.org/en/story/2024/08/1153486

¹⁰³ Fournier, J.M.; Quilici, M.L. (2007, March 1). [Cholera]. Presse Med, 36:2, 727-39.

¹⁰⁴ U.S. Centers for Disease Control and Prevention. (2024, May 9). Measles Symptoms and Complications. https://www.cdc.gov/measles/signs-symptoms/index.html#:~:text=Death.,low-birth-weight baby ¹⁰⁵ European Centre for Disease Prevention and Control. (2023, November 28). Disease factsheet about

¹⁰⁶ Jamaluddine et al. (2024). Crisis in Gaza. P. 16. According to the "escalation" scenario, which has occurred.

¹⁰⁷ Jamaluddine et al. (2024). Crisis in Gaza. P. 24. Under the "escalation" scenario, which has occurred.

that hold garbage and the vehicles that move it. Waste pileups are exacerbated by fuel shortages, the fact that Israel's military has made it unsafe for Palestinians to move through space, as well as the killing, injuring, and displacement of staff. The lack of solid waste infrastructures increases rates of disease and infection, inviting animals and insects into proximity with people. It also pollutes Gaza's air, water, and soil. Waste burning is one way for Palestinians to mitigate waste pileups that choke their air and fill the last remaining spaces in which they can live. This too heightens the likelihood of respiratory illnesses as it releases airborne dioxins.

West Bank

In the West Bank, the Israeli military has encircled and blocked off access to hospitals and soldiers have denied access to medical care for the injured. They have also targeted and killed healthcare workers and ambulance drivers. In a May 2024 Israeli military raid on Jenin that killed seven Palestinians, Israelis soldiers shot dead Dr. Oussaid Jabareen, a 50-year-old surgeon who was on his way to work at the Jenin Governorate Hospital. In June, during another Israeli offensive on Jenin, Dr. Wissam Bakr, the director of Jenin Hospital, reported to WAFA News Agency that "Israeli forces hindered the work of medical and administrative teams at the hospital by imposing a blockade on the roads leading to the hospital." Jenin's governor Kamal Abu al-Rub reported that Jenin's main public hospital, which was treating 150 patients at the time, was locked down in Israel's incursion in the city beginning in late August 2024.

By September 4, Jenin's mayor Nidal al-Obaidi reported that "the hospital had to stop operations in several departments due to water and electricity shortages and a lack of medical supplies, adding that dialysis patients were transferred to Nablus to continue their treatment." What is happening in Jenin portends an environmental and food catastrophe and complete paralysis of life," he said. Israeli soldiers and drones have repeatedly shot at Palestinian ambulances in the West Bank, sometimes injuring or killing drivers and paramedics.

¹⁰⁸ Amnesty International. (2024, August 28). Israel/OPT: Palestinians face drastic escalation in unlawful killings, displacement as Israel launches West Bank military operation.

https://www.amnesty.org/en/latest/news/2024/08/israel-opt-palestinians-face-drastic-escalation-in-unlawful-killings-displacement-as-israel-launches-west-bank-military-operation/

¹⁰⁹ Gritten, D. (2024, May 21). Seven Palestinians killed in Israeli West Bank Raid. BBC. https://www.bbc.com/news/articles/c0wwp2d0gd4o#

 $^{^{110}}$ Wafa. (2024, June 13). Israel continues its offensive in Jenin city and refugee camp for over 12 hours. https://english.wafa.ps/Pages/Details/145031

¹¹¹ United Nations Human Rights Office of the High Commissioner. (2024, September 2). Apartheid Israel is targeting Gaza and the West Bank simultaneously, says expert. https://www.ohchr.org/en/press-releases/2024/09/apartheid-israel-targeting-gaza-and-west-bank-simultaneously-says-expert

¹¹² ShalashNader Durghan, F. (2024, September 4). Life for Jenin residents 'in paralysis' as Israeli operation enters second week. Middle East Eye. https://www.middleeasteye.net/news/life-jenin-paralysis-israeli-operation-enters-second-week.

Environmental Contamination

The Israeli government's destruction of Gaza's sanitation and solid waste management infrastructures has combined with its destruction of roads, buildings, and agricultural lands to create an environmental disaster of monumental proportions. In June, the UN Environment Program (UNEP) estimated that "the destruction of buildings, roads, and other infrastructure has generated over 39 million tons of debris, some of which is contaminated with unexploded ordnance, asbestos, and other hazardous substances." The report specified that each square meter of the Gaza Strip is now littered with more than 236 lbs (107 kilograms) of debris, adding that this number is more than five times the debris generated during the battle for Mosul, Iraq in 2017. In July, United Nations Relief and Works Agency estimated that it will take fifteen years to clear the rubble. Value of food sources, exacerbating food insecurity and ongoing economic collapse.

Since October 7, Israeli bombings of farmland already heavily contaminated by Israel's "herbicidal warfare" in Gaza since 2014¹¹⁵ have been contaminated by explosive weapons. "Explosive remnants of war, including unexploded ordnance and mines, render land inaccessible to farm and block the transport of goods."¹¹⁶ Debris is known to jeopardize human health and the environment, including from dust and contamination with unexploded ordnance, asbestos, industrial and medical waste, and other hazardous substances. In Gaza, UNEP further reported that "wind and rain may carry contaminants in the dust into the soil, ground- water and coastal waters, potentially causing impacts to spread beyond the site of original damage or in locations where debris has been disposed."¹¹⁷

In the West Bank, damage and destruction of infrastructure by the Israeli military along with Israeli settler attacks on Palestinian farmlands, including by burning and

 $^{^{113}}$ UNEP. (2024, June). Environmental Impact of the Conflict in Gaza: Preliminary Assessment of Environmental Impacts.

https://wedocs.unep.org/bitstream/handle/20.500.11822/45739/environmental_impact_conflict_Gaza.pdf?sequence=3&isAllowed=v

 $^{^{114}}$ Burke, J. (2024, July 15). Clearing Gaza of almost 40m tonnes of war rubble will take years, says UN. The Guardian. $\underline{ \text{https://www.theguardian.com/world/article/2024/jul/15/clearing-gaza-of-almost-40m-tonnes-of-war-rubble-will-take-years-says-un}$

 $^{^{115}}$ Mohlavi, S. Herbicidal Warfare in Gaza. Forensic Architecture, 2014-ongoing. $\underline{\text{https://forensic-architecture.org/investigation/herbicidal-warfare-in-gaza}}$

¹¹⁶ Savell, S. (2023, May 15). How Death Outlives War: The Reverberating Impact of the Post-9/11 Wars on Human Health. Costs of War, Watson Institute, Brown University. P. 14.

https://watson.brown.edu/costsofwar/files/cow/imce/papers/2023/Indirect%20Deaths.pdf

¹¹⁷ UNEP. (2024, June). Environmental Impact of the Conflict in Gaza: Preliminary Assessment of Environmental Impacts. P. 26.

https://wedocs.unep.org/bitstream/handle/20.500.11822/45739/environmental impact conflict Gaza.pdf? sequence=3&isAllowed=y

removing trees and raw settlement sewage being emitted into agricultural lands, are all posing extreme public health risks. 118

While assessing the full extent of environmental contamination in Gaza and the West Bank will take years, its effects on human health will undoubtedly play a critical role in adding to the number of indirect deaths.

¹¹⁸ Norwegian Refugee Council. (2024, March 21). West Bank: Israeli Settlement Wastewater Destroys Palestinian Lands and Livelihoods. https://www.nrc.no/news/2024/march/west-bank-israeli-settlement-wastewater-destroys-palestinian-lands-and-livelihoods/; see also Anera. (2024, April 19). West Bank Situation Report. https://www.anera.org/wp-content/uploads/2024/04/April-2024-West-Bank-Situation-Report.pdf; The Times of Israel. (2024, June 7). Reports: Extremist settlers set fire to buildings, cars and trees in Palestinian West Bank villages. https://www.timesofisrael.com/liveblog-entry/reports-extremist-settlers-set-fire-to-buildings-cars-and-trees-in-palestinian-west-bank-villages/