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Deprived and Endangered:

Humanitarian Crisis in the Gaza Strip

SUMMARY

Gaza's 1.5 million people are enduring a serious humanitarian crisis brought on by more than two weeks of major military operations that have magnified the impact of 19 months of a highly restrictive Israeli blockade, reinforced by Egypt.

The Israeli government has repeatedly denied that a humanitarian crisis exists. Information from international humanitarian organizations, United Nations agencies and Gaza's residents themselves starkly refute that claim. Hundreds of civilians have been killed in the fighting, a large percentage of them children. Many wounded and sick have been trapped in their homes, unable to get medical care. Corpses have been left among rubble and in destroyed homes because Israeli forces have at times denied access to medical crews. Increasing numbers are displaced or are trapped in their homes. They have nowhere to flee, caught in a warzone where no place is truly safe.

Gaza's civilians are facing dire shortages of food, water, cooking gas, fuel and medical care due to insecurity, the enforced closure of all of Gaza's borders, and alleged serious violations of international humanitarian law. Electricity is sharply down, and in some places open sewage is spilling into the streets. Children, who make up 56 percent of Gaza's residents, are especially vulnerable.

Humanitarian law provides that Israel as an occupying power must ensure the safety and well-being of the civilian population. The blockade is a form of collective punishment in violation of international law. Prior to the current military operation, about 80 percent of the Gaza Strip's population – 1.2 million people – relied on food aid,¹ a significant proportion

¹ The UN and international organizations distributed 80 percent of this food aid; non-governmental organizations delivered the remainder. UN Office for the Coordination of Humanitarian Affairs (OCHA), "Report from the Humanitarian Coordinator," January 6, 2009.

was malnourished,² and more than half was food-insecure, or living on less than 2.6 US dollars per day.³ But security concerns caused by the current fighting have severely hampered UN agencies' food distribution operations.

Those in hospitals are getting only rudimentary care from facilities that lack equipment, material and personnel. Many of those whose medical needs cannot be met by Gaza hospitals – including cardiovascular surgery and neurosurgery – have been unable to access medical care in Israel or Egypt. Israel has permitted only a limited number of critically injured patients to enter Israel since the start of the current military operations. Egypt is also preventing timely evacuations of severely wounded from Gaza, despite pledges from Turkey and Qatar, among others, to receive the wounded at Egypt's Rafah border crossings and evacuate them to hospitals in third countries.⁴

The water, sewage and electricity infrastructure – already severely debilitated by the blockade – is now stretched to a breaking point. The World Bank and the World Health Organization have warned of the dire consequences of epidemics from the discontinuation of vaccinations, lack of garbage collection and contaminated water.

An unknown number of Gazans have been traumatized by two weeks of air, sea and groundbased attacks in a small, confined area that lacks safe areas and from which escape is nearly impossible. Israeli military strikes have hit on or near at least two UN buildings operating as emergency shelters, in one case killing 40 people.⁵

Humanitarian law places obligations on states and non-state armed groups like Hamas to facilitate humanitarian assistance and the movement of humanitarian workers. Among other incidents in which Israel reportedly interfered unlawfully with aid or medical delivery, the Israel Defense Forces (IDF) reportedly blocked the International Committee of the Red Cross (ICRC) and Palestinian Red Crescent Society (PRCS) from accessing badly wounded and dead civilians for several days. On January 8, the UN Relief and Works Agency for Palestine

² Up to 30 percent of Gazans have micro-nutrient deficiencies, and 61 percent of Palestinian children and 26 percent of pregnant Palestinian women suffer from anemia. OCHA, *Occupied Palestinian Territory Consolidated Appeal 2009*, p. 24.

³ OCHA, Occupied Palestinian Territory Consolidated Appeal 2009, p. 24.

⁴ Rebecca Santana, "Doctors stuck at bottleneck on Egypt – Gaza border," Associated Press, January 6, 2009.

⁵ Inside Gaza, a reported 25,696 people are sheltering in 31 emergency shelters established by UNRWA. On January 6, the IDF fired at least three tank shells that struck adjacent to a school in Jabaliya, killing about 40 people and wounding 100. In another strike on an UNRWA school sheltering the displaced on January 6, three members of one family died.

Refugees in the Near East (UNRWA), which 750,000 Gazans have long depended on for food aid, decided to suspend aid deliveries in Gaza after Israeli strikes killed two of its drivers.⁶

In recent days, Israel has taken some steps to address the crisis. The IDF announced on January 7 that it had established a Humanitarian Affairs Coordination Center (HACC) to coordinate between the different relief organizations operating in the field and those of the IDF. Beginning on January 7, it announced a three-hour cessation of hostilities, a so-called "humanitarian pause," for the distribution of aid. Ambulances were able to retrieve some of the wounded and dead.

These steps have not been enough to address the dire humanitarian concerns. According to the UN, the humanitarian pause was "totally insufficient" to aid the population living in "increasingly appalling" conditions. UN Under-Secretary-General for Humanitarian Affairs John Holmes said that because of the lack of adequate advance warning for the initial pause, "it was very hard for us to make significant use of [the stoppage in the fighting]." Humanitarian groups believe that similarly short humanitarian pauses in the future will not provide them enough time to address the urgent needs of Gaza's civilian population.

According to the UN Logistics Cluster, responsible for coordinating aid delivery and distribution to Gaza during the crisis, 89 trucks carrying humanitarian aid crossed up to the Palestinian side of the Kerem Shalom border crossing on January 8, but no humanitarian aid had entered Gaza by or on January 9.⁷ Gaza border crossings were closed on January 10, for Shabbat. On January 11, a new protocol was established whereby trucks would not be allowed to enter Karem Shalom from the Israeli side unless trucks were already waiting to receive the aid on the Gazan side.⁸ On January 11, the cargo that had piled up on the Palestinian side was cleared, and 93 truckloads entered Gaza through Kerem Shalom crossing including 55 truckloads for aid agencies.⁹

⁶ According to UNRWA, the attack occurred around 2 pm, during the humanitarian pause, when three UN vehicles went to Beit Hanoun to retrieve the body of a colleague who had been killed. UNRWA said it had clearly marked the vehicles and given the IDF their coordinates, but the convoy came under fire, apparently from two directions. Earlier that day, the IDF shelled a UNcontracted convoy transporting food through the Erez crossing. One UNRWA-contracted worker was killed and two injured. "Major UN agency suspends Gaza relief operations after Israeli strike kills two drivers," UN press release, January 8, 2009, http://www.un.org/apps/news/story.asp?NewsID=29489&Cr=gaza&Cr1=unrwa (accessed January 8, 2009); "Statement attributable to the Spokesperson for the Secretary-General on Gaza," UN press release, January 8, 2009 http://www.un.org/apps/sg/sgstats.asp?nid=3650 (accessed January 8, 2009).

⁷ UN Gaza Logistics Cluster, "Gaza Crisis Sitrep," January 8, and "Gaza Crisis Sitrep," January 9, 2009.

⁸ UN Gaza Logistics Cluster, "Gaza Flash News," January 11, 2009.

⁹ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 12, 2009.

Obtaining some relief for the suffering of the people of Gaza will require urgent measures to protect their security and the aid that is required to keep them alive. The delivery of humanitarian supplies needs to be dramatically escalated – prioritizing wheat flour, fuel, cooking gas, and medical supplies, as well as spare parts for repairs to the essential infrastructure. The distribution of these supplies must be facilitated by the creation of humanitarian corridors and access and freedom of movement for humanitarian agencies. Both Israel and Hamas should respect safe areas created to protect civilians both by not attacking them and by not conducting military operations in the vicinity – even though these and other measures to facilitate aid are grossly inadequate to meet needs at present and need to be expanded. Israel and Egypt should open their borders to permit humanitarian aid to reach Gaza and to allow civilians to seek safety from the fighting.

BACKGROUND

The Blockade of Gaza Before "Operation Cast Lead"

Israel, which effectively controls Gaza's airspace and its land and sea borders, severely limited the flow of people, fuel, food, medicine, money and other essential goods into and out of Gaza for 19 months prior to the Israeli attacks that began on December 27, 2008. Egypt shares some of the blame for the humanitarian crisis in Gaza, having largely kept its border with Rafah closed during the Israeli blockade. These restrictions, crippling in themselves, greatly diminished the ability of Gaza's residents and its infrastructure to cope with the humanitarian impact of armed conflict. These restrictions also amounted to a form of collective punishment by Israel against the civilian population in violation of international humanitarian law.¹⁰

Hamas defeated Fatah in parliamentary elections in Gaza and the West Bank in January 2006.¹¹ In June 2007, Hamas forcefully took over all governmental and military institutions in Gaza. Since then, Hamas' armed wing, the al-Qassam Brigades, and other Palestinian armed groups in Gaza have launched thousands of rockets and mortar shells at Israeli population centers, in violation of the prohibition against deliberate and indiscriminate attacks on civilians under international humanitarian law. During the first 22 days of 2008 alone, Palestinian militants fired around 230 mortar shells and 110 rockets into Israel.¹² Magen David Adom (Israeli Red Cross) said that between December 27, 2008, and January 12, 2009, more than 500 Gaza-launched rockets have hit Israel, killing three civilians and wounding 78 people, four critically.¹³

Israel maintains that it imposed border closures and fuel and electricity cuts in response to these attacks on Israel by Hamas and other Palestinian armed groups. However, violations of

¹⁰ See, for example, Human Rights Watch, "Letter to Olmert: Stop the Blockade of Gaza," November 20, 2008, http://www.hrw.org/en/news/2008/11/20/letter-olmert-stop-blockade-gaza; Human Rights Watch, "Human Rights Watch written statement on Gaza to the UN Human Rights Council," January 21, 2008,

http://www.hrw.org/en/news/2008/01/21/human-rights-watch-written-statement-gaza-un-human-rights-council.

¹¹ Israel ceased transferring tens of millions of dollars in monthly customs revenues to Hamas in February. "Israel to impose Hamas sanctions," BBC News, February 19, 2006, available at http://news.bbc.co.uk/2/hi/middle_east/4729000.stm (accessed January 10, 2009).

¹² Address by Ms. Louise Arbour, UN High Commissioner for Human Rights on the occasion of the 6th Special Session of the Human Rights Council, 23 January 2008, available at www.domino.un.org.

¹³ Human Rights Watch telephone conversation with IDF foreign press spokesperson's office, January 7, 2009; Magen David Adom, "News Update 12.01.09", http://www.mdais.com/316/4155.htm (accessed January 12, 2009).

the laws of war by one side to an armed conflict do not legitimate violations by the other.¹⁴ For example, on June 28, 2006, after a Palestinian armed group from Gaza captured the Israeli soldier Gilad Shalit and unlawfully held him as a hostage,¹⁵ the Israeli Air Force fired eight missiles at Gaza's sole power plant, rendering the six transformers inoperable. Israel subsequently delayed or blocked the delivery of material needed to repair the plant, leaving it capable of producing 80 megawatts per day out of an original capacity of 100 megawatts.

Israel's restrictions on food, fuel and other essential goods, as well as on agricultural and industrial exports from Gaza, have had a devastating impact on Gaza's economy.¹⁶ In its quarterly report in October 2008, the World Bank stated that due to the blockade of Gaza, "only about 2% of industrial establishments are still functioning," industrial employment had fallen from 35,000 in 2005 to a mere 840, and 40,000 jobs in agriculture had been destroyed.¹⁷

Without a functioning economy, by 2008, 80 percent of Gaza's 1.5 million people relied on food aid and close to 70 percent lived in "deep poverty," defined as a family of six persons or more living on income of less than US\$467 per month.¹⁸

Even as Israeli border closures increased Gaza's dependency on humanitarian aid, Israel increasingly restricted that aid. Israel allowed an average of 475 daily truckloads of humanitarian aid into Gaza during May 2007, 123 in October 2008, and only six in November

¹⁴ On January 30, 2008, the Israeli Supreme Court rejected a petition submitted by ten Israeli and Palestinian human rights groups challenging Israel's restrictions on Gazan fuel and electricity imports. The Court accepted the state's proposal to maintain a "minimum humanitarian standard," which has no basis in international humanitarian law. Israel has never defined what constitutes Gaza's minimum humanitarian needs, nor how it determines if it is meeting those needs.

¹⁵ Human Rights Watch, "Gaza/Israel/Lebanon: Release the Hostages," July 4, 2007,

http://www.hrw.org/en/news/2007/07/04/gazaisraellebanon-release-hostages.

¹⁶ By September 2007, border closures had already forced 85 percent of Gaza's factories to close or to operate at less than 20 percent of their capacity, froze 95 percent of construction projects, and drove unemployment to record highs. From June to September 2007, 70,000 Gazan workers in the private sector lost their jobs, and the loss from agricultural exports alone was \$16 million. Steven Erlanger, "Gaza economic collapse puts businessmen, legal and illicit, in a bind," *The New York Times*, September 18, 2007, http://www.iht.com/articles/2007/09/18/africa/gaza.php (accessed January 8, 2008). See also Maher Najjar, "Fire and Water in Gaza," *The Washington Post*, November 27, 2007, http://www.washingtonpost.com/wp-dyn/content/article/2007/11/26/AR2007112601851.html (accessed January 8, 2009), and Gisha, "Commercial Closure: Deleting Gaza's Economy from the Map," July 2007,

http://www.gisha.org/UserFiles/File/publications_english/Publications%20and%20Reports_English/Formatted-Deleting%20Gaza%20Economy%20from%20the%20Map.doc (accessed January 13, 2009).

¹⁷ World Bank Group, "West Bank and Gaza Update: October 2008," p. 14,

http://siteresources.worldbank.org/INTWESTBANKGAZA/News%20and%20Events/21958608/WBGUpdateOcto8Eng.pdf (accessed January 10, 2009).

¹⁸ The poverty figure excludes remittances and food aid; if they are included, the deep poverty rate is 35 percent. World Bank, "Country Brief: West Bank and Gaza," September 2008,

http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/WESTBANKGAZAEXTN/0,,contentMDK:20149751~menuP K:294370~pagePK:1497618~piPK:217854~theSitePK:294365,oo.html (accessed January 12, 2009).

2008.¹⁹ Restrictions eased slightly during a six-month ceasefire between Hamas and Israel in 2008, but intensified to an "unprecedented" level after November 4, 2008.²⁰ On that day Palestinian rocket attacks increased following an Israeli incursion into Gaza that killed four Hamas fighters. Very few international humanitarian personnel have been allowed into Gaza since that time.

The basis for some of Israel's actions appears to be a Cabinet decision on September 19, 2007, which declared Gaza a "hostile territory" and decided to restrict "the passage of people to and from Gaza" and to reduce further supplies of fuel and electricity.²¹ The restrictions on fuel and electricity, repeatedly challenged in the Supreme Court by Israeli and Palestinian human rights groups, amounted to collective punishment against the civilian population.

Israeli officials have implicitly acknowledged that the blockade of Gaza amounts to collective punishment. "There is no justification for demanding we allow residents of Gaza to live normal lives while shells and rockets are fired from their streets and courtyards at Sderot and other communities in the south," Prime Minister Ehud Olmert said on January 23, 2008.²² Israeli Defense Ministry spokesman Shlomo Dror said on January 18, 2008: "If Palestinians don't stop the violence, I have a feeling the life of people in Gaza is not going to be easy."²³

²² "PM: Gazans can't expect normal lives while rockets hit Israel," *Haaretz*, January 23, 2008,

¹⁹ UN Office for the Coordination of Humanitarian Affairs, occupied Palestinian territory (OCHAoPt), "Gaza Humanitarian Situation Report: The Impact of the Blockade on the Gaza Strip: A Human Dignity Crisis," December 15, 2008.

²⁰ UN Office for the Coordination of Humanitarian Affairs (OCHA), "Gaza Humanitarian Situation Report: The Impact of the Blockade on the Gaza Strip: A Human Dignity Crisis," December 15, 2008.

²¹ On January 23, 2008, Hamas helped Palestinians break through sections of the wall and fence separating Gaza and Egypt, to the southwest of Rafah, allowing tens of thousands of Palestinians into Egypt, where they bought goods, many of them essential, including fuel. Egyptian forces, with cooperation from Hamas, resealed the border on February 3.

http://www.haaretz.com/hasen/spages/947515.html (accessed January 8, 2009). According to *Haaretz*, the Prime Minister added, "Does anyone seriously think that our children will wet their beds at night in fear and be afraid to go out of the house and they (Gazans) will live in quiet normality?"

²³ Ellen Knickmeyer, "Israel Blocks Supplies, Steps Up Gaza Airstrikes," *The Washington Post*, January 19, 2008, http://www.washingtonpost.com/wp-dyn/content/article/2008/01/18/AR2008011800622_pf.html (accessed January 8, 2009).

"OPERATION CAST LEAD" AND EXPLOSION OF THE HUMANITARIAN CRISIS

Medical Emergencies and Health Care

The fatalities and casualties from the first 17 days of "Operation Cast Lead" are the highest in the Israeli-Palestinian conflict in decades, and have completely overwhelmed the capacity of the already weakened medical facilities in Gaza.

According to the Gaza Ministry of Health, as of January 12, 2009, IDF attacks in Gaza had killed at least 910 Palestinians – both civilians and combatants – and wounded another 4,250.²⁴ More than 292 children and 75 women are among the dead; more than 1,497 children and 626 women had been wounded. According to the UN, over 40% of the dead and 50% of the wounded are women and children.²⁵ As of January 11, 413 of the wounded persons were in critical condition, requiring intensive care.²⁶

The actual number of wounded and dead is likely higher, because some of them have not been able to reach hospitals or be brought to morgues. An unknown number of civilians are trapped in various parts of Gaza, some with wounded and dead relatives, and some with dwindling if not exhausted supplies of water and food. Because of the fighting and restraints imposed by the IDF, access to these trapped civilians is limited, and agencies have been compelled to evacuating the most dire cases, leaving others temporarily behind.

Humanitarian Problems Due To Border Closures

Although accurate statistics are not available, the ICRC and other medical officials in Gaza believe that some wounded persons are needlessly dying because of a lack of timely medical care.²⁷ As early as December 30—when the casualty estimates were 300 wounded—the World Health Organization (WHO) warned of a surge in preventable deaths if no action was taken to address the lack of capacity of the Gaza hospitals in dealing with mass casualties:

²⁴ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 12, 2009.

²⁵ UN, "Gaza: UN Official Reports Horrific Hospital Scenes Of Casualties," January 12, 2009, http://www.un.org/apps/news/story.asp?NewsID=29520&Cr=gaza&Cr1=unrwa.

²⁶ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 10-11, 2009.

²⁷ International Committee of the Red Cross Operational Update, "Gaza: Wounded People Dying While Waiting for Ambulances," January 5, 2009.

Hundreds of wounded people, including women, children, and the elderly, lie in hospitals that already lack basic supplies. The inability of the hospitals to cope with a problem of this magnitude, if the situation continues unchanged, will result in a surge in preventable deaths from complications due to trauma. Civilians are paying the price for the prolonged blockade.²⁸

Like all of Gaza, hospitals were affected by electricity cuts since the Gaza power plant stopped functioning from December 30, 2008 to January 10, 2009, and relied exclusively on generators for electricity. The main generator at the Al-Quds Hospital of the Palestine Red Crescent Society in Gaza City broke down on January 5, and has since only been able to supply power to the operating theater and the intensive care unit.²⁹ As of January 7, the main hospital in Gaza, al-Shifa, had enough generator fuel for only three days; the Gaza Pediatric Hospital had even less. Only urgent surgery was being carried out as of January 9, and outpatient clinics were closed.³⁰ According to the World Health Organization, as of January 11, most hospitals were receiving three hours of electricity per day from the power plant, and had also received fuel to run back-up generators, but the Gaza Pediatric Hospital had only two days of fuel reserves left, and ambulances at Kamal Edwan Hospital had run out of fuel.³¹

Another crucial problem is the inability to transfer severely wounded persons out of the Gaza Strip for further medical treatment. Gaza's hospitals lack the capacity to provide specialist intensive care, and also need to be relieved of seriously wounded patients who require longterm intensive care. Only two options are available to transfer such patients out of Gaza: either to Israel through the Erez crossing, or to Egypt through the Rafah crossing.

Transfers to Israel have been limited, because Israel has insisted that the Palestinian Authority's Health Ministry guarantee that it will cover the financial costs associated with medical treatment provided in Israel, while the Palestinian Authority has taken the position that Israel, not the Palestinian Authority, should be responsible for covering the medical costs associated with treating Palestinians wounded in Israeli airstrikes. The dispute between Israel and the Palestinian Authority held up any transfers from Gaza into Israel until UNRWA on December 29 provided financial guarantees for a 16-year-old Palestinian wounded outside one of its schools, and the Peres Center for Peace provided financial

²⁸ "Medical shortages in Gaza may lead to surge of deaths among wounded, UN warns," United Nations press release, December 30, 2009.

²⁹ OCHA, "Situation Report from the Humanitarian Coordinator," January 7, 2009.

³⁰ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 9, 2009.

³¹ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 10-11, 2009.

guarantees for two additional children on December 31. Only four critically injured patients have been transferred to Israel since the start of the conflict, and such transfers ended when Israel launched its ground offensive on January 3.³² Israel's policy of demanding financial guarantees for the medical costs of wounded Palestinians is inconsistent with its obligations as the occupying power in Gaza under international humanitarian law to provide for the healthcare of the civilian population.

So far, Israel has taken inadequate steps to address the medical crisis. After denying a war surgery team from the ICRC entry for at least three days, on January 5, Israel allowed the two doctors and two nurses into Gaza to assist at al-Shifa hospital in Gaza City.³³ The Israeli authorities also have allowed five ambulances donated by Turkey and an additional five ambulances transferred by the Palestinian Red Crescent Society from the West Bank to enter Gaza, and have allowed some shipments of medicine and blood to enter Gaza.³⁴

Egypt is also preventing timely evacuations of severely wounded persons from Gaza, despite pledges from Turkey and Qatar, among others, to receive the wounded at the Rafah border crossings and evacuate them to hospitals in third countries. According to a well placed source, Egypt refused Turkey permission to land a plane specially equipped for medical evacuations at the al-Arish airport, near the Gaza border, saying that the airport was closed for security reasons.³⁵ The Egyptian restrictions on using the Rafah border crossing to evacuate wounded persons center around a dispute regarding the control of the Rafah border post on the Palestinian side. After the takeover of Gaza by Hamas, Fatah-controlled Palestinian Authority officials at the Rafah border were replaced with Hamas officials, and European Union monitors present at the crossing withdrew. Egypt's position is that it will not normalize the Rafah border crossing procedures until the Palestinian side of the Rafah crossing is once again in the hands of the Palestinian Authority, with the presence of European Union monitors.

According to Egypt's Ministry of Health, Egypt had allowed a total of 182 wounded persons to enter through Rafah as of January 9, including 54 wounded on December 30 and 31.³⁶

³² Human Rights Watch telephone interview with Physicians for Human Rights-Israel official Miri Weingarten, January 6, 2009; Physicians for Human Rights-Israel, "Update—December 31," January 1, 2009.

³³ International Committee of the Red Cross Operational Update, "Gaza: Wounded People Dying While Waiting for Ambulances," January 5, 2009.

³⁴ Taghreed El-Khodary, "Gaza Hospital Fills Up, Mainly With Civilians," *New York Times*, January 4, 2009.

³⁵ Human Rights Watch email communication with confidential source, December 30, 2008.

³⁶ Egyptian Ministry of Health statistics as of January 9, 2009; Rebecca Santana, "Doctors stuck at bottleneck on Egypt – Gaza border," Associated Press, January 6, 2009.

Egyptian Ministry of Health representative Tarek al Mahallawy told Human Rights Watch that relatively few people had crossed because it was difficult to communicate with the hospitals in Gaza.³⁷ Once they crossed to Rafah, wounded Palestinians told Human Rights Watch that they were taken fairly promptly to al-Arish General Hospital and the Mubarak Military Hospital in al-Arish.³⁸ Patients stable enough to be transferred are sent to Cairo, and as of January 9, thirty-six have been flown to Saudi Arabia, eight to Jordan, and four to Libya. Each patient was accompanied by one relative.

A doctor at al-Arish General Hospital, Ayman al-Hady, told Human Rights Watch that no Egyptian ambulances or trucks have been allowed to cross into Gaza at Rafah.³⁹ The doctor said there had been three cases of children brought in with bullets in the head as of January 9.

On-the-ground Human Rights Watch research found that only medical supplies were allowed through Rafah into Gaza as of January 9; Egyptian officials were removing blankets and food from humanitarian aid shipments and not allowing them through. Some aid shipments have had to wait two days to get through even though they had the necessary permits. Prior to January 11, doctors were not allowed through, with the exception of two or three Norwegian doctors facilitated by the Norwegian embassy on the basis of a special arrangement. Egypt refused to allow 46 Egyptian doctors from the Union of Arab Doctors, as well as a number of Greek doctors from Doctors for Peace, to cross into Gaza. On January 11, Egypt allowed 23 international surgeons, eight truckloads of aid, and three new ambulances to enter Gaza via Rafah. This was the first time that Egypt permitted any non-medical humanitarian supplies were allowed in through Rafah.⁴⁰

In the second week of January Egypt improved access into Gaza for medical personnel. On January 11, the authorities let in 14 doctors (two Algerians and eight Jordanians), and the next day they let in another 61 (51 Egyptians, seven Jordanians, two Yemenis, and one Moroccan).

³⁷ Human Rights Watch interview with Tarek el Mahallawy, Rafah, Egypt, January 9, 2009.

³⁸ Human Rights Watch interviews with wounded Gazans in hospital in Cairo, January 8, 2009.

³⁹ Human Rights Watch interview with Ayman al Hady, al Arish, Egypt, January 9, 2009.

⁴⁰ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 12, 2009.

Humanitarian Problems Due To Insecurity and Fighting

According to Gaza's Ministry of Health, about 70 percent of chronic patients who need regular health care have been forced to interrupt their treatment due to the security situation.⁴¹ For those wounded by the fighting who make it to one of Gaza's 26 medical facilities, treatment is rudimentary because medical staffs are overwhelmed by the sheer number of patients requiring life-saving care. There are insufficient doctors and nurses at the hospitals, and some staff are unable to reach their places of work because of the fighting and IDF checkpoints. On January 5, the ICRC tried and failed to coordinate safe passage for a bus with 58 hospital staff to their place of work.⁴²

Gaza's hospitals have run out of beds for patients. Gaza's al-Shifa hospital is reportedly using four obstetric wards as surgery rooms and has stopped admitting women for deliveries.⁴³ In a morgue in Gaza, staff have had to put two corpses in each storage drawer to conserve space.

Due to the ongoing fighting and destroyed roads, ambulances have been unable to reach the wounded in many areas of Gaza. According to UNICEF, only half of Gaza's 58 ambulances are working.⁴⁴ In the past, the ICRC has facilitated coordination between the Palestinian Red Crescent Society and the IDF and other Israeli officials, but such coordination has become extremely difficult both because of the intensity of the ongoing fighting in Gaza, and the lack of cooperation from the IDF.

Israel's aerial bombardment of Gaza's roads and the subsequent ground attack have created impasses effectively dividing Gaza into two. Residents in one section of Gaza who need medical treatment only available in the other section are unable to access such treatment. For example, Palestinians in middle and southern Gaza with kidney problems face serious risks of blood poisoning because they cannot travel to al-Shifa hospital in Gaza City, the only hospital in the territory that can provide dialysis.⁴⁵ Similarly, the main medical storehouse for Gaza is also in Gaza City; and it is extremely difficult to get supplies from the warehouse

⁴¹ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 10-11, 2009.

⁴² OCHA, "Situation Report from the Humanitarian Coordinator," January 7, 2009.

⁴³ UNICEF press release, "UNICEF delivers supplies for children suffering as a result of critical shortages of food, fuel and medicine in Gaza," January 5, 2009, http://www.reliefweb.int/rw/rwb.nsf/db900SID/MYAI-7N25FB?OpenDocument

⁴⁴ UNICEF press release, "UNICEF delivers supplies for children suffering as a result of critical shortages of food, fuel and medicine in Gaza," January 5, 2009, http://www.reliefweb.int/rw/rwb.nsf/db900SID/MYAI-7N25FB?OpenDocument (accessed November 8, 2009).

⁴⁵ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 9, 2009.

to hospitals elsewhere in Gaza. Many medical supplies are in critical shortage, largely due to distribution problems in the war-torn coastal area.⁴⁶

Several documented cases exemplify the difficulties faced by wounded Palestinians in reaching medical assistance. The Israeli *Haaretz* newspaper reported that at about 10:30 p.m. on January 3, a few hours after the IDF launched its ground offensive, an Israeli attack struck the home of Hussein al-A`aiedy, located in an agricultural area east of Gaza City. The attack wounded five persons, including two elderly women in their eighties and three children aged 14, 13, and 10. *Haaretz* reported that because the cell phone network was down, it took Hussein al-A`aiedy until noon the next day to reach a relative to try and arrange the evacuation of the wounded. Despite the involvement of the ICRC, the Palestinian Red Crescent Society, Physicians for Human Rights-Israel, and contacts with the IDF's liaison's office, the wounded civilians were still waiting for medical assistance twenty hours after the attack, when the *Haaretz* article went to press.⁴⁷ As of January 7, *Haaretz* reported, based on mobile phone calls with al-A`aiedy, that the wounded still had received no medical care, and that their wounds had become infected.⁴⁸

In another case documented by the ICRC, ambulances were unable to reach a woman in labor from the Zeitoun area in northern Gaza on January 4, and she ultimately had to be brought to the hospital in a donkey cart. As a result, her baby died and the woman suffered a ruptured uterus.⁴⁹ Human Rights Watch documented one case of an elderly woman who fell on the second day of airstrikes and broke her hip. As of January 7, no ambulance was able to take her to the hospital due to more serious life-threatening cases.⁵⁰

Because of the heavy fighting, humanitarian agencies report difficulties distributing the medical aid that enters Gaza to the hospitals where it is needed most. The humanitarian organization CARE stated on January 5 that medical supplies it delivered to Gaza on January 2 were sitting in a warehouse, as it was too dangerous to transport them.⁵¹

⁴⁶ OCHA, "Situation Report from the Humanitarian Coordinator," January 7, 2009.

⁴⁷ Amira Hass, "Wounded Gaza Family lay bleeding for 20 hours," *Haaretz*, January 4, 2009, http://www.haaretz.com/hasen/spages/1052606.html (accessed January 8, 2009).

⁴⁸ Amira Hass, "86 hours after Gaza home shelled, family still lacks medical aid," Haaretz, January 7, 2009, http://www.haaretz.com/hasen/spages/1052902.html (accessed January 12, 2009).

⁴⁹ ICRC, "Gaza—ICRC Bulletin No. 4/2009," January 4, 2009.

⁵⁰ Human Rights Watch interview with Abu Hasan, Jerusalem, January 7, 2009.

⁵¹ "Food in Gaza running out Care distributions halted by Israeli ground assault," CARE press release, January 5, 2009, http://www.care-international.org/index.php/Food-in-Gaza-running-out-CARE-distributions-halted-by-Israeli-ground-assault.

Humanitarian Problems Due To Possible Humanitarian Law Violations

The IDF has at times blocked access to the wounded and dead by ambulances of Palestinian medics and the ICRC, adding to the civilian death toll. In a particularly horrific case reported by the ICRC, on January 7, an ICRC vehicle and four Palestine Red Crescent Society ambulances with nine medical workers gained access for the first time to several houses in the Zaytun neighborhood of Gaza City that had been hit by Israeli shelling. The ICRC said that it had requested permission from the IDF since January 3 to access the area, but the IDF only granted permission four days later. A crew from the ICRC and the Palestinian Red Crescent Society found 12 corpses lying on mattresses and four young children lying next to their dead mothers. Three corpses lay in another house, and 15 survivors of an airstrike were in a third house, some of them wounded.⁵² IDF soldiers held positions as close as 80 meters to the house when the medics arrived, and other Israeli soldiers and two tanks were present nearby, the ICRC said.⁵³. When the medics finally arrived, the soldiers ordered them to leave, but the medics refused. The soldiers then prevented them from taking the bodies in an ambulance, so they had to remove the bodies on a donkey cart. The donkey had died, a PRCS medic who took part in the evacuation, told Human Rights Watch, so they had to push the cart with the bodies to the ambulance. Because of all the time this took, the medics left 104 people behind, and returned to get them the next day.⁵⁴

Medical facilities and ambulances have also been hit by Israeli attacks, in some cases resulting in casualties among medical personnel. On January 5, Israeli forces reportedly shelled an ambulance of al-`Awda hospital in the north, seriously injuring four medical staff. On January 4, an Israeli airstrike struck an ambulance in Beit Lahiya run by the Union of Health Work Committees, funded by Oxfam, killing one paramedic, Arafa Abd al-Dayim, 33, and gravely wounding another, `Ala' Sarhan, 22. According to the Palestinian Red Crescent Society, they were trying to evacuate a wounded person from a site attacked by an Israeli airstrike when the plane returned and struck the same site again.⁵⁵ The UN reported that between January 9 and 10, the Dorah Paediatrics Hospital closed down except for emergency services after sustaining damage due to shelling or artillery fire; the European Gaza Hospital, El Nasser Paediatric Hospital, and the Sabha al Harazin and Hala al Shawa primary health

⁵² International Committee of the Red Cross, "Gaza: ICRC demands urgent access to wounded as Israeli army fails to assist wounded Palestinians," ICRC press release, January 8, 2009, http://www.icrc.org/web/eng/siteengo.nsf/html/palestine-news-080109?opendocument (accessed January 8, 2009).

⁵³ ICRC press release, January 8, 2009.

⁵⁴ Human Rights Watch interview with Palestinian Red Crescent Society medic, Gaza City, January 8, 2009.

⁵⁵ Palestinian Red Crescent Society, "Gaza Situation Update January 4 to January 5, 2009," January 5, 2009.

care centers also sustained damage from Israeli attacks.⁵⁶ On January 12, Caritas, a humanitarian aid NGO, reported that an air-strike "completely destroyed" its medical clinic in the al Maghazi district of Central Gaza.⁵⁷

The *New York Times* reported that armed Hamas members have also interfered with the work of medical facilities, reportedly keeping an armed presence within some hospitals; and carrying out at least six executions of wounded persons at al-Shifa hospital, mostly of suspected "collaborators" whom Hamas had imprisoned in Gaza and who had been wounded in an Israeli airstrike on the main prison in Gaza.⁵⁸

Access to Food

Humanitarian Problems Due To Border Closures

The air offensive Israel launched in midmorning on December 27, 2008, caught many Gazans by surprise and unprepared for an extended conflict. Because of their limited purchasing power and the limited availability of food due to the Israeli blockade, many Gazans did not have extensive food stocks in their homes.

Of the 750,000 Gazans who depend on food aid from UNRWA, 94,000 are "special hardship cases" including the chronically ill, the disabled, the elderly, and the very young.⁵⁹ Of the additional 265,000 Gazans who rely on the World Food Program (WFP) for food, 90,000 are "destitute cases" almost totally dependent on food.⁶⁰ International humanitarian groups that provide food aid, like Oxfam, CARE and Action Against Hunger, are unable to help because Israel has barred their personnel from entering Gaza since November 4, 2008.⁶¹

UNRWA's spokesman told Human Rights Watch on January 6 that the agency's beneficiaries last received regular food distributions on or before December 18, when UNRWA had exhausted its warehoused food supply⁶²: Israel did not allow wheat supplies to enter as

⁵⁶ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 10-11, 2009.

⁵⁷ "Caritas medical clinic in Gaza destroyed by Israeli jet attack," Caritas press release, January 12, 2009,

http://www.caritas.org/newsroom/press_releases/PressRelease12_01_09.html

⁵⁸ Ethan Bronner and Taghreed al-Khodary, "No Early End Seen to 'All-Out War' on Hamas in Gaza," New York Times, December 29, 2009, http://www.nytimes.com/2008/12/30/world/middleeast/30mideast.html?hp (accessed January 10, 2009).

⁵⁹ UNRWA, "Refugee families in special hardship," http://www.un.org/unrwa/programmes/rss/specialhardship.html.

⁶⁰ Human Rights Watch interview with Christine VanNeuwenhieysen, January 5, 2009.

⁶¹ Israel allowed one Oxfam employee in to Gaza several weeks ago. Human Rights Watch interview with John Prideaux-Brune, Oxfam country director for the Occupied Palestinian Territories, January 5, 2009.

⁶² Human Rights Watch interview with Christopher Gunness, UNRWA, January 6, 2008.

scheduled on December 9 and 10, and had restricted UNRWA to bringing in 20 trucks of food aid per day over the previous month, although the agency said 50 trucks were needed.⁶³ Due to Israeli restrictions, the last normal WFP food distribution occurred more than two months ago.

As of January 6, the UN reported that many Gazans could not get basic food items such as rice, flour and oil.⁶⁴ Bakeries had not received wheat flour since the beginning of Israel's ground operation, and only nine out of 47 bakeries in Gaza were operating.⁶⁵ Wheat grain, essential to provide the flour, was lacking; the Karni Crossing conveyor belt could import the grain but remains closed.⁶⁶ To exacerbate the food shortages, the lack of cash available at banks restricts Gazans' ability to purchase food supplies.

On January 10 and 11, after resuming operations based on Israeli assurances of the security of its staff, UNRWA had distributed food to 8,763 of its 94,000 special hardship cases, as well as other deliveries, including to persons sheltering at UNRWA schools. From January 9 to 11, WFP distributed food parcels to 3,089 families, as well as other food distributions.⁶⁷

According to OCHA, "Although some goods are being allowed into Gaza, the reduction in the number of trucks allowed in means that agencies are not receiving the amount of goods they require to respond to the needs of the population."⁶⁸ As of January 12, "Many basic food items, including food for infants and malnourished children, are no longer available."⁶⁹

Humanitarian Problems Due To Insecurity and Fighting

In many parts of Gaza, the ongoing fighting is preventing families from leaving their homes to purchase food or obtain food aid. Even when families are able to leave their homes, they often find shops and bakeries closed because of the intensity of the fighting. As a result, many families have run out of food. Because of the fighting and restrictions imposed on movement, the UN humanitarian community is struggling to provide adequate relief.

⁶³ IRIN, "Israel-OPT: UNRWA suspends food distribution in Gaza," December 19, 2008, http://www.irinnews.org/report.aspx?ReportID=82022.

⁶⁴ OCHA, "Situation Report from the Humanitarian Coordinator," January 6, 2009.

⁶⁵ Ibid

⁶⁶ Ibid.

⁶⁷ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 10-11, 2009; OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 12, 2009.

⁶⁸ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 10-11, 2009.

⁶⁹ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 12, 2009.

After almost two weeks of completely suspending food distribution, UNRWA distributed dry food supplies "under extremely difficult circumstances" to almost 20,000 people a day from January 1 until January 5. Widespread fighting prevented any food distribution on January 6 by UNRWA or the World Food Program; on the following day, UNRWA was able to distribute food out of six of its distribution centers.⁷⁰ As of January 9, UNRWA had given food to less than a quarter of its beneficiaries since Operation Cast Lead began,⁷¹ but it suspended operations again due to Israeli attacks that killed two of its personnel.

WFP has been able to reach only 50,000 of its 265,000 beneficiaries since the Israeli offensive began, according to the WFP.⁷² The head of the WFP in the Occupied Palestinian Territories told Human Rights Watch on January 5 that the agency cannot access half of its food supplies in Gaza due to the security situation. On January 7, it was able to distribute some food in Gaza City, Khan Younis and the Middle Area.⁷³

Humanitarian Problems Due To Possible Humanitarian Law Violations

Due to the long-standing shortages of cooking gas and electricity, the only option available to some families for cooking is to use open fires on the roof of their buildings, a dangerous option if they are spotted by Israeli planes. In one case documented by *Haaretz*, two children, Ahmed Sabih, 10, and Mohammed al-Mashharawi, 14, went to the roof of their home in Gaza City on January 4 to heat water over an open fire. An Israeli missile was fired at the boys, killing Ahmed instantly and seriously wounding Mohammed.⁷⁴ Israel pumped some cooking gas from the Nahal Oz border crossing on January 6, but Palestinians could not pick it up due to fears of being targeted.⁷⁵

Civilians have also come under fire while shopping for food. According to news reports, an Israeli attack that hit Gaza City's main market on January 4 killed at least five civilians and wounded others who were shopping for food and supplies.⁷⁶

⁷⁰ OCHA, "Situation Report from the Humanitarian Coordinator," January 6, 2009; OCHA, "Situation Report from the Humanitarian Coordinator," January 8, 2009.

⁷¹ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 9, 2009.

⁷² Human Rights Watch interview with Christine Van Nieuwenhuyse, January 5, 2009.

⁷³ OCHA, "Situation Report from the Humanitarian Coordinator," January 8, 2009.

⁷⁴ Amira Hass, "Wounded Gaza Family lay bleeding for 20 hours," *Haaretz*, January 4, 2009.

⁷⁵ OCHA, "Situation Report from the Humanitarian Coordinator," January 6, 2009.

⁷⁶ Ethan Bronner, "Israeli ground invasion cuts Gaza in two," *International Herald Tribune*, January 4, 2009, http://www.iht.com/articles/2009/01/04/mideast/gaza.php.

Access to Water

Humanitarian Problems Due To Border Closures

Gaza's Coastal Municipal Water Utility (CMWU) stated on January 4 that more than 530,000 people in Gaza were cut off from running water, and the rest of the population was receiving water only intermittently because of the effects of military operations and the impact of electricity cuts on the water pumping and distribution system.⁷⁷ According to the CMWU's Deputy Director, Maher Najjar, 48 of Gaza's 130 water wells were not functioning on January 4 because of a lack of electricity and damage to pipes, and another 45 wells were functioning only partially or would have to be shut down within days because of fuel shortages.⁷⁸

Because Gaza's only power plant did not function at all between December 30 and January 10, and many of the power lines in Gaza have been damaged by military operations (see "Electricity", below), at least 10 of the 45 water wells in Gaza City were no longer functioning as of January 5.⁷⁹

Following the delivery of 20,000 liters of fuel to water wells on January 7 and 8 during the periods of humanitarian ceasefire, the number of people without running water decreased by 30,000 to 500,000. However, the CMWU estimated that the number will increase again if fuel supply is not continued.⁸⁰ On January 10, the water authority stated that approximately 500,000 people had no access to running water, 500,000 people received water for four to six hours every week, and 500,000 people received water for the same amount of time every two to three days.⁸¹

Humanitarian Problems Due To Insecurity and Fighting

Because of the density of the population in Gaza, most Palestinians live in crowded apartment buildings. These buildings generally rely on water storage tanks placed on the roof of the apartment, and these water tanks require pumps (run by electricity) to be replenished. In some cases, the shelling and gunfire has damaged the water tanks themselves. Even undamaged water tanks are emptying fast and cannot be replenished because of the breakdown of wells and the lack of electricity for pumps. Without access to

⁷⁷ OCHA, "Situation Report from the Humanitarian Coordinator," January 5, 2009.

 ⁷⁸ Gisha, "Gaza Electricity, Water, and Sewage Systems on Verge of Collapse," January 4, 2009.
⁷⁹ Ibid.

⁸⁰ OCHA, "Situation Report from the Humanitarian Coordinator," January 8, 2009.

⁸¹ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 10-11, 2009.

other water sources and unable to go outside to look for water due to the fighting, many families face critical water shortages for drinking, cooking, and washing.

Water infrastructure has also been directly damaged by Israeli attacks. Airstrikes in the al-Mughraga area on January 2 cut off water supplies to 30,000 people in the nearby Nuseirat refugee camp.⁸² In addition, as of January 10, according to the Gaza water authority, Israeli strikes had damaged water lines in the Nuseirat refugee camp, in Gaza City, in Tuffah east of Gaza City (which supplies water to almost 100,000 people) and in Bir el Naja in northern Gaza (on which 150,000 people rely).⁸³ Repairs to the damaged infrastructure are dangerous, and can often not be performed because of the ongoing fighting and shortages in replacement parts. CMWU workers have reportedly been afraid to carry the water pipe segments needed to repair water systems out of fear of being mistaken for militants carrying missiles.

Sewage Treatment

Gaza's sewage system, already under severe strain before Israel launched its military offensive, is on the verge of collapse, threatening hundreds of thousands of people with disease, displacement in a time of armed conflict, and even drowning in sewage. The World Bank warned on January 7 that 10,000 people who live near a sewage lagoon were in danger of drowning, as the fragile lagoon could break its banks under the impact of heavy rain, sonic booms or nearby explosions. The scenario would create an "environmental and public health disaster," the Bank said.⁸⁴

A previous sewage flood killed five people, injured 25 injured and displaced 1,500 when the sewage lagoon outside Umm Nasr flooded overflowed on March 26, 2007, submerging dozens of houses in water and effluent.⁸⁵

As of January 6, sewage was flooding into the streets of several urban areas and threatening to contaminate drinking water supplies. Because of the fighting, there were no functioning

⁸² "OCHA, "Gaza Humanitarian Situation Report #3," January 3, 2009.

⁸³ Ibid.

⁸⁴ World Bank, "Fact Sheet: Gaza strip water and sanitation situation," January 7, 2009,

http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/WESTBANKGAZAEXTN/o,,contentMDK:22026701~menu PK:294383~pagePK:2865066~piPK:2865079~theSitePK:294365,00.html.

⁸⁵ Donald Macintyre, "Five killed after sewage floods village in Gaza," March 28, 2007,

http://www.independent.co.uk/news/world/middle-east/five-killed-after-sewage-floods-village-in-gaza-442158.html.

sanitation services, including solid waste disposal.⁸⁶ Sewage continued to overflow in Beit Lahiya and Beit Hanoun on January 7.⁸⁷ "Solid waste is piling up in the streets of Gaza," OCHA reported on January 9.⁸⁸

Humanitarian Problems Due To Border Closures

Gaza's sewage system depends on power and fuel to function. The World Bank found that the Gazan water and sewage utility had enough fuel for the system to function for one day if it could be distributed, but that distribution was impossible due to fighting.⁸⁹ According to OCHA, on January 5 sewage was flooding after five of Gaza's 37 waste water pumping stations shut down due to lack of electricity. The remaining 32 stations were operating only partially and would shut down within days unless they received more diesel.⁹⁰ According to Maher Najjar, Deputy Director of Gaza's water utility, "The water and sewage system in Gaza is collapsing."⁹¹

Humanitarian Problems Due To Insecurity and Fighting

Israeli attacks also have damaged the sewage system. From December 31, 2008 to January 2, 2009, the UN reported that five Israeli air strikes hit water and sewage systems in Beit Hanoun, including the main sewage pipeline to the city's waste treatment plant at Beit Lahia. Sewage was "pouring into the streets," creating a serious risk of disease.⁹² Even though the pipeline to Beit Lahia is badly damaged, the level of the plant's sewage lagoon is rising dangerously because there is no fuel to pump out sewage overflow.⁹³ The Gaza water and sewage authority is also concerned that the waste water plant at Sheikh Ajlan southwest of Gaza City will overflow.⁹⁴ On January 10, Israeli strikes hit the Gaza City Wastewater

⁸⁶ OCHA, "Situation Report from the Humanitarian Coordinator," January 6, 2009.

⁸⁷ OCHA, "Situation Report from the Humanitarian Coordinator," January 7, 2009.

⁸⁸ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 9, 2009.

⁸⁹ World Bank, "Fact Sheet: Gaza strip water and sanitation situation," January 7, 2009.

⁹⁰ OCHA, "Situation Report from the Humanitarian Coordinator," January 5, 2009,

 $http://www.ochaopt.org/gazacrisis/admin/output/files/ocha_opt_gaza_situation_report_2009_01_05_english.pdf$

⁹¹ Cited in Gisha, "Gaza Electricity, Water and Sewage Systems on Verge of Collapse," January 4, 2008,

http://www.gisha.org/index.php?intLanguage=2&intSiteSN=113&intItemId=1429

⁹² OCHA, "Situation report from the humanitarian coordinator," January 2, 2009.

⁹³ OCHA, "Situation report from the humanitarian coordinator," January 5, 2009.

⁹⁴ OCHA, "Situation report from the humanitarian coordinator," January 8, 2009.

Treatment Plant, which contains up to 300,000 cubic meters of wastewater, damaging a treatment pond embankment and causing 200,000 cubic meters in leakage.⁹⁵

Electricity

Humanitarian Problems Due To Border Closures

For 12 days beginning December 30, roughly one million Gazans – two thirds of the population – had no electricity.⁹⁶ The lack of electricity during that time forced all of Gaza's hospitals, overwhelmed with war casualties, to run on generators full time. Hospitals were dangerously close to running out of generator fuel, and January 7 the ICRC announced that some hospital generators, "could break down at any moment from the lack of maintenance and spare parts over the past 18 months."⁹⁷ As outlined above, the lack of electricity has had a grave impact on water-pumping stations, sewage-treatment facilities and other infrastructure essential for the well-being of Gaza's population.

Gaza's only power plant stopped operating on December 30, 2008, due to the lack of industrial diesel it requires to run. Since November 5, 2008, Israel has allowed only 18 percent of the fuel the plant needs into Gaza. The plant resumed partial operation on January 10. After repairs on January 11 and 12, approximately 40 percent of North Gaza, Gaza and Middle Area Governorates were getting electricity for 8-12 hours per day.

On January 12, 235,000 liters of industrial fuel made it to the power plant; 360,000 more liters were at the Palestinian side of the Nahal Oz pipeline. The UN was awaiting confirmation from the Israeli authorities that it was safe to bring the fuel to the plant. Also on January 12, the Palestinian Minister of Telecom and Information Technology issued a list of needs to repair the telecommunication network. Spare parts, batteries and small electricity generators are needed, he said.⁹⁸

Humanitarian Problems Due To Insecurity and Fighting

Israeli military attacks have severely damaged the electrical infrastructure. Attacks on January 2 shut down six of ten power lines coming into Gaza from Israel and one of two

⁹⁵ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 10-11, 2009; and OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 12, 2009..

⁹⁶ "Ambulances Face Growing Difficulty in Reaching Gaza Wounded, UN Warns New York," January 5 2009, http://www.un.org/apps/news/story.asp?NewsID=29465&Cr=gaza&Cr1= (accessed January 6, 2009).

⁹⁷ICRC, "Gaza: plight of civilians traumatic in 'full-blown crisis'," January 7, 2009, http://www.icrc.org/web/eng/siteengo.nsf/htmlall/palestine-press-briefing-060109?opendocument

⁹⁸ OCHA, "Situation report from the humanitarian coordinator," January 12, 2009.

power lines coming from Egypt. On January 3, all of Gaza City and most of northern Gaza was without electricity, and Rafah had limited electricity.⁹⁹ By January 7, fewer than 50,000 people in Gaza City received power, and only three to six hours per day.¹⁰⁰ According to Gaza's electricity company, GEDCO, as of January 7, five out of the ten electricity lines from Israel were still not functioning.¹⁰¹ While GEDCO reported on January 8 that it had fixed all of the damaged electrical lines from Israel with the exception of one line in northern Gaza, it said that the compounded damage to the network meant that the majority of these lines were not being utilized.¹⁰² Localized damage meant large areas of Gaza were still without power on January 9.¹⁰³

⁹⁹ "Gaza Electricity, Water and Sewage Systems on Verge of Collapse," Gisha, January 4, 2009, http://gisha.org/index.php?intLanguage=2&intltemId=1429&intSiteSN=113, accessed January 6, 2008.

¹⁰⁰ OCHA, "Situation report from the humanitarian coordinator," January 7, 2009.

¹⁰¹ Ibid.

¹⁰² OCHA, "Situation report from the humanitarian coordinator," January 8, 2009.

¹⁰³ OCHA, "Field Update on Gaza from the Humanitarian Coordinator," January 9, 2009.

LEGAL STANDARDS AND ISRAEL'S OBLIGATIONS

The current armed conflict between Israel and Hamas and other Palestinian armed groups is governed by international treaty and the rules of customary international humanitarian law (the laws of war). This body of law addresses many issues regarding the provision of humanitarian assistance and humanitarian access. Human Rights Watch does not address whether Hamas or Israel is justified in resorting to armed force or in the extent of forces deployed – we believe this approach is the best way for us to promote the goal of encouraging all sides in armed conflicts to respect international humanitarian law. As such, we do not address certain issues, such as the suitability of humanitarian ceasefires or pauses, which bear on decisions to resort to force or withhold from using it,

Especially relevant to the humanitarian situation in Gaza is the law on occupation found in the Fourth Geneva Convention of 1949, to which Israel is party.¹⁰⁴ The Fourth Geneva Convention on occupation applies in Gaza because although Israel withdrew its military forces and settlers from the Gaza Strip in 2005, it still exercises control over Gaza's airspace, sea space and land borders, as well as its electricity, water, sewage and telecommunications networks and population registry. And Israeli military forces can and have reentered Gaza at will.

Also applicable are the customary rules of humanitarian law, based on established state practice, which bind all parties to an armed conflict, whether states or non-state armed groups. These derive in part from the First Additional Protocol of 1977 to the Geneva Conventions¹⁰⁵ and the Hague Regulations of 1907,¹⁰⁶ which are widely accepted as reflective of customary law.

Occupying powers have a duty to ensure the security and well-being of the civilian population in areas under their control. Article 55 of the Fourth Geneva Convention, which governs occupation, places a duty on an occupying power to ensure the food and medical supplies of the population, as well as to permit and facilitate the provision of humanitarian relief. This requirement also applies to specific Israeli forces wherever in Gaza they exercise effective control. Israel's continuing blockade of the Gaza Strip, a measure that is depriving

¹⁰⁴ Geneva Convention Relative to the Protection of Civilian Persons in Time of War of August 12, 1949.

¹⁰⁵ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I) of 8 June 1977

¹⁰⁶ Hague Convention (IV) Respecting the Laws and Customs of War on Land, 1907.

its population of food, fuel, and basic services, constitutes a form of collective punishment in violation of article 33 of the Fourth Geneva Convention.

Customary international humanitarian law prohibits the attacking, destroying, removing or rendering useless objects indispensible to the survival of the civilian population.¹⁰⁷ At the same time, it requires parties to a conflict to allow and facilitate the rapid and unimpeded passage of impartially distributed humanitarian aid to the population. It is prohibited to use starvation of the civilian population as a method of warfare¹⁰⁸—belligerent parties must allow the free passage of food relief to civilians at risk.¹⁰⁹ They must consent to allowing relief operations to take place but may not refuse such consent on arbitrary grounds. They can take steps to control the content and delivery of humanitarian aid, such as to ensure that consignments do not include weapons.¹¹⁰ A deliberate refusal to permit access to these supplies in response to military action can constitute collective punishment or an illegal reprisal against the civilian population.

Belligerent parties under international humanitarian law must also ensure the freedom of movement of humanitarian relief personnel essential to the exercise of their functions. This movement can be restricted only temporarily for reasons of imperative military necessity.¹¹¹ Aid workers and medical personnel may never be deliberately attacked.¹¹² Medical transports must be respected and protected at all times; they lose their protection if they are used outside their humanitarian function to commit acts harmful to the enemy.¹¹³

Serious violations of international humanitarian law that are committed with criminal intent are war crimes.¹¹⁴ War crimes related to humanitarian assistance include: making medical personnel, units or transport the object of attack; making persons involved in humanitarian assistance the object of attack; using starvation of civilians as a method of warfare by

¹⁰⁷ Protocol I, art. 54(2).

¹⁰⁸ Protocol I, art. 54(1).

¹⁰⁹ Geneva IV, art. 23.

¹¹⁰ Protocol I, art. 70(2).

¹¹¹ Protocol I, art. 71(3).

¹¹² Protocol I, arts. 15 and 71(2).

¹¹³ Protocol I, art. 21.

¹¹⁴ While the term "war crime" is colloquially used to mean any particularly heinous laws of war violation by a person or warring party, Human Rights Watch uses the term in its technical legal sense. A war crime is a serious violation of certain rules of international humanitarian law committed with criminal intent (that is, intentionally or recklessly) by an individual. War crimes are enshrined in applicable treaties, such as the grave breaches provisions of the 1949 Geneva Conventions and 1977 Additional Protocols and the Rome Statute of the International Criminal Court, and in customary international humanitarian law.

depriving them of objects indispensible to their survival, including by impeding relief supplies; and imposing collective punishments, among others. Individuals also may be held criminally liable for attempting to commit a war crime, as well as assisting in, facilitating, aiding or abetting a war crime.

Responsibility also may fall on persons planning or instigating the commission of a war crime. Commanders and civilian leaders may be prosecuted for war crimes as a matter of command responsibility when they knew or should have known about the commission of war crimes and took insufficient measures to prevent them or punish those responsible. States have an obligation to investigate and fairly prosecute individuals within their territory implicated in war crimes. Non-state armed groups should also investigate and take action as appropriate against any person who commits war crimes.

RECOMMENDATIONS

To the Government of Israel

- Take all possible measures to facilitate the work of humanitarian and medical agencies.
- Support humanitarian corridors and other measures to facilitate access of medical and humanitarian personnel, and civilians fleeing the fighting. Open border crossings for the evacuation of the wounded out of Gaza. Facilitate the transfer of the wounded to hospitals in Gaza and then, if necessary to referral outside Gaza.
- Take all necessary steps to ensure that forces do not attack humanitarian aid personnel and their facilities, supplies, and transportation.
- Dramatically expand the humanitarian effort with more trucks allowed into Gaza every day, more crossings opened, and greatly improved internal distribution within Gaza. The current daily three hour "humanitarian pause" is greatly inadequate for aid delivery. Specific recommendations by humanitarian agencies include:
 - Prioritize increased wheat grain, fuel (industrial and regular), cooking gas and cash.
 - Open the Karni crossing for the delivery of wheat via the conveyor belt.
 - Allow the unimpeded flow of fuel through Nahal Oz, including industrial diesel for the power plant, as well as ordinary diesel, petrol and cooking gas.
 - Allow the importation of spare parts and equipment essential for the rehabilitation of essential civilian infrastructure.
- Support efforts by the United Nations to create areas that have an enhanced capacity to protect civilians from the ongoing hostilities. Take all feasible measures to avoid military operations in or near such areas, such as UNRWA schools and other places accommodating displaced persons.
- Cease all attacks on infrastructure essential for the survival of the civilian population, such as the water infrastructure, the electrical grid, the sewage system
- Allow independent observers, including journalists and human rights monitors, access to Gaza.

To Hamas

• Take all possible measures to facilitate the work of humanitarian and medical agencies

- Support efforts by the United Nations to create areas that have a dramatically enhanced capacity to protect civilians from the ongoing hostilities. Take all feasible measures to avoid military operations near such areas, such as UNRWA schools and other places accommodating displaced persons.
- Support humanitarian corridors and other measures to facilitate access of medical and humanitarian personnel, and civilians fleeing the fighting.

To the Government of Egypt

• Open Rafah crossing to permit humanitarian aid to reach Gaza and to allow civilians to seek safety from the conflict, ensuring that anyone who flees is entitled to return upon completion of hostilities.

To the UN Security Council

- Promote respect for and implementation of the humanitarian provisions of Resolution No.1860 passed on January 8, 2009.
- Urge Egypt and Israel to open their borders to Palestinian civilians seeking temporary refuge or medical care
- Urge the Israeli government to allow independent observers, including journalists and human rights monitors, access to Gaza so that accurate and timely information about the humanitarian situation is publicly available.
- Press both Israel and Hamas to respect international humanitarian law in all respects, including enabling the delivery of humanitarian and medical relief and refraining from attacks that deliberately, indiscriminately, or disproportionately endanger civilians.