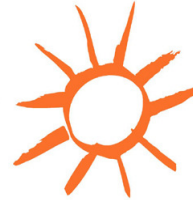


# Fact-finding mission into medically-related violations in the Gaza Strip during 27.12.08- 18.01.09

Abbreviated version

רופאים לזכויות אדם - ישראל (ע"ר)  
أطباء لحقوق الإنسان-إسرائيل  
Physicians For Human Rights - Israel



# Fact-finding mission into medically-related violations in the Gaza Strip during 27.12.08-18.01.09

## Abbreviated version prior to report

The 3-week Israeli offensive on the Gaza Strip, much of it concentrated in densely populated residential areas, left the world with heavy suspicions that serious violations of International Humanitarian Law had been committed. The near-absence of independent observers in Gaza during the attacks meant that what had occurred there was subject to speculations and argument from the start.

Immediately following the ceasefire on 18 January, two health and human rights NGOs, one Israeli and one Palestinian, Physicians for Human Rights-Israel (PHR-Israel) and the Palestinian Medical Relief Society (PMRS) came together to issue a joint international call for **independent external medical experts** in order to conduct an investigation into medically-related violations of human rights and into the broader impact of the attacks on health in the Gaza Strip.

**Five independent experts** in the fields of forensic medicine, burns, medical response to crises and public health, from Germany, Denmark, South Africa and Spain, immediately answered the call and traveled to Gaza between 29 January and 5 February 2009 for their first fact-finding investigation. A second mission to hospitals in Egypt, where some of the most seriously wounded were being treated, took place between 2 March and 7 March 2009.

## Experts:

- Professor Jorgen Thomsen, Denmark: Forensic pathology
- Dr. Ralf Syring, Germany: Public health in crisis regions
- Professor Shabbir Ahmed Wadee, South Africa: Forensic pathology
- Professor Sebastian Van As, South Africa: Trauma surgery
- Ms. Alicia Vacas Moro, Spain: International health
- Ms. Magali Jandaud, France: International Humanitarian Law

## Mandate of mission and report

- Contribution of evidence in the form of photographs, written medical records and records by impartial professionals of physical examinations and of interviews.
- Recording of the information gathered according to categories related to adherence to international humanitarian law and human rights, especially in the fields of **protection of medical personnel and facilities, evacuation of injured, protection of civilians and the use of weapons against civilians.**
- Initial impressions of the types of injuries sustained
- Initial impressions of the impact of the attacks on public health and on the health system
- Initial impressions of the general nature of the attacks in Gaza within the context of human rights
- A preliminary legal analysis

It is important to stress that the information that could be gathered in such a limited project is by nature preliminary and partial. The report aims to provide raw materials in order to contribute to and corroborate broader ongoing and planned fact-finding projects by civil society and/or local and international institutions.

# 1. Denial of evacuation and attacks on medical teams

## Number of case studies in the report: 13

- 160 coordination requests were received for ambulances. 1160 people were evacuated. 16 ambulances of PRCS and 13 of the Ministry of Health were damaged.
- The team was told that in the course of the most recent attack it could take 2, 3 and in some occasions even up to 15 days before permission was granted to enter certain areas.
- The team was told of frequent attacks on ambulances and cases of prevention of evacuation of the wounded.

## Case Study - The Shurrah family

In January a storm had damaged the TV satellite dish on his house. His son Qassab (28) came to see him and to repair the dish, accompanied by his younger brother Ibrahim, (18). On Friday, 16 January, the three of them wanted to go back to Khan Yunis. There were certain hours of cease fire during these days. So they were told that there was a cease fire from 10:00 to 13:00 hours that day. So they left after the prayer at noon in the red Land Rover, first using the dust road which led them to the asphalt road. Muhammad drove slowly. Already on the asphalt road he saw two Israeli tanks on his left side. However, there was no fighting. He waved to the soldiers, who waved back, and proceeded. After about 200 m, the car was hit by gun fire. The shooting hit the front windscreen of the car. Muhammad was hit in his upper left arm. He shouted at his sons to put their heads down and tried to protect himself. The windscreen of the car was hit by 22 bullets. He lost control over the car and stopped it at the side of the street.

The soldiers were in a house about 40 m in front of them. They shouted at them and ordered them to leave the car. Qassab left the car and started walking in the direction of the house where the soldiers were. He was immediately shot at in his face. When Ibrahim also left the car, he was hit by a gunshot in his leg. Muhammad saw four soldiers standing at the main entrance of the house shouting at them. Ibrahim tried to call the emergency number 101 with his mobile phone, but the soldiers shouted that they would kill him, if he used his phone and ordered him to throw it away.

Muhammad then slipped out of the car and crawled to Ibrahim. He managed to grasp his own mobile phone and called 101. The ambulance centre told him that they were not allowed to come to the area to rescue them. He then asked the soldiers to give them first aid, but the answer was a warning shot. Then he managed to get contact with his brother, who again tried to phone an ambulance. In the ambulance centre, they recommended that the brother should inform media about the situation, which he did. As a consequence of that, Muhammad was called several times by media like Al Jazeera and BBC, while he was lying on the road with his sons. He was also called by Tom Mehager of Physicians for Human Rights Israel during the night, who tried to comfort him.

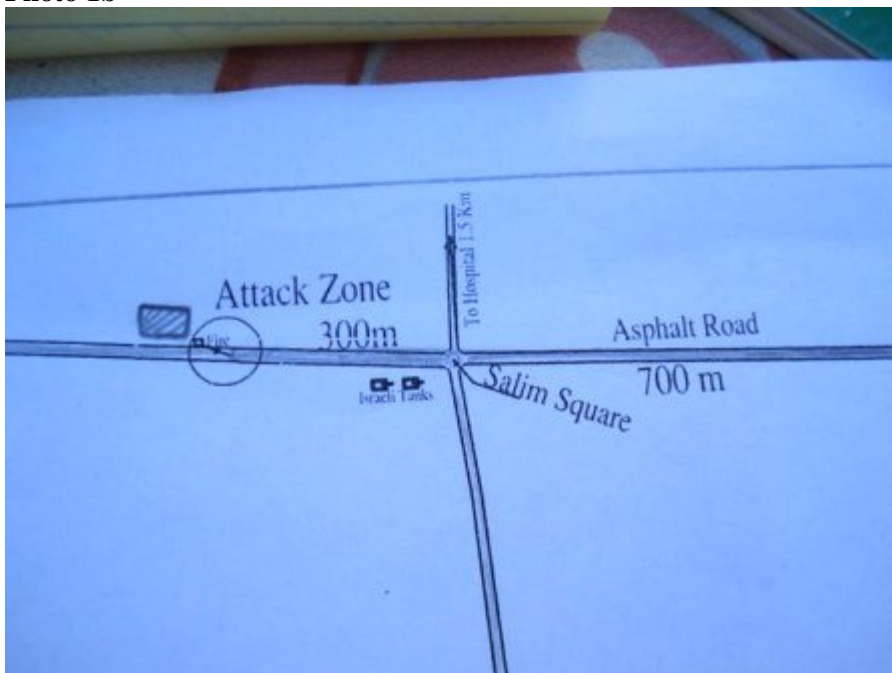
It became dark and cold. Muhammad approached the body of his older son and found him dead. At about 20:00 he took Ibrahim into the car in order to protect him from the cold. Ibrahim continued bleeding from his leg and became weaker. They were about 1 km from the European Hospital. Ibrahim died at about 00:30. An ambulance finally arrived at 11:00 the next day, meaning that 23 hours had passed since they had been shot at. Muhammad had to stay five days in hospital, while his two sons were dead.

- T1, testimony of Muhammad Qassab Khalil Shurrab, 64, at his home in Khan Yunis, 2.2.09
- Other material evidence attached: testimony in writing by witness (Arabic), translation into English (Appendix 5).

Photo 1a



Photo 1b



**Photo 1c**



**Photo 1d e**



**OR: Case Study – Abu Halima family**

"...We were going down the street Kamal Adwan, and we had almost reached the school when the soldiers halted us. A tank appeared on the street and stopped close to the school. The soldiers were occupying the second floor of a building which was only 20 meters away from the street. They could see that we were all wounded and dirty from the explosions, because the tractor was open at the back. They shot at us, killing my cousins Matar Saad Abu Halima and Muhammad Hikma Abu Halima, who were driving us to the hospital. The soldiers ordered us to get out of the tractor, and they asked me to take off my clothes. I did it and they checked all my body. I think they were looking for explosives, but we were all

injured and in pitiful conditions. How could we think of carrying explosives when my younger siblings and my own children were dying?

Then, when I was almost expecting death, they shouted at me: “you can get dressed and go”. They did not allow us to use the tractor.

I held my sister Shahed in my arms ... but the soldiers said that the baby was already dead, so they forced me to leave her in the car. I tried to help my wife Ghada, who was completely burned, and they forced us to walk to the hospital. For about 300 meters the soldiers were shooting at our feet as we walked, raising so much dust that the wounds of my wife became full of dirt. After a while we saw a lorry on the road. It was overcrowded with people going to the hospital after the heavy attacks, but they made us room and we arrived at Shifa' Hospital....“

- **Muhammad Saad Abu Halima, 24, the father of Farah, 30 months old, who was injured in the attack, in a testimony to the team (T9) at the Military Hospital in Hilmiya, Egypt, 2 March 2009. The full testimonies on this case are in Chapter 4.1, Case Study 5.**

**Photo 9**



### **Case Study – Beit Lahiya Roundabout: shooting prevents ambulance evacuation and injures emergency personnel**

...on January 4 2009 he was informed that at Beit Lahiya Roundabout, Ward-al Garbi, an “incident” had occurred. Accompanied by two First Aiders/ Paramedics, Arafa Hani Abd El Dayem (33) and Ala’a Usamah Sarhan (26) he responded to the call. On arrival at the scene they noted 5 adolescents had been seriously injured- one with a bilateral and another with a unilateral amputation of their lower limbs and proceeded to evacuate them. While evacuating



patients they were hit directly by a tank shell from the rear. Khaled Saada the driver was flung from his seat due to the ensuing explosion. He noted blood on his head but was still able to walk and perform his duties. Paramedic Arafah was fatally wounded and Ala'a Usamah sustained Sciatic Nerve Injuries and was transferred to Egypt for further management.

- T13, testimony of Khaled Yussuf Ahmad Abu Saada, 42, ambulance driver at the Al Awda hospital ambulance center to the team, 30 Jan 09.

Photo 13a



Photo 13b



## 2. Attacks on medical facilities

**Number of case studies in the report: 3**

### **Case Study – Al Wafa Hospital**

The hospital has a special department for people with disabilities and a home for the elderly. All buildings of the hospital as well as a new building, which had not yet been equipped and inaugurated, have been damaged by shooting from tanks. The Hospital was attacked on the 16<sup>th</sup> January 2009. This was the third attack on this particular hospital. The hospital was previously attacked twice, the first time in 2006 and the second time in April 2008, in one of which two nurses died when they were shot at by Israeli soldiers who were occupying a building in front of the hospital. Rooms for patients with considerable damage were shown to us.

**Photo 17a**





Photo 17b



Photo 17c



### 3. Types of injuries: Maiming and amputations

#### Number of case studies in the report: 10

- A high number of amputations and maiming among the wounded was recorded by the team.
- According to doctors interviewed by the team in Egypt, 150 amputees were referred from Gaza to Egyptian hospitals. The PMRS in Jabalia said that it has a list of at least 165 newly disabled patients of whom at least 90 have amputations.
- According to some of the medical professionals spoken to, the reason for the high rates of maiming and amputations was partly to do with the use of anti-personnel weapons. The use of **drones** (unmanned aircraft) was also closely associated by medical professionals with injuries causing amputations.

#### Case Study – Abu Yussuf AlNajjar hospital in Rafah – the “disc bomb”

On 2 Feb 2009 the team visited Rafah. While they were on their way they were told of a bombing of a car with three injured young men. They hurried to the Abu Yussuf AlNajjar Hospital where they met with the hospital Director, Abdallah Shehada, and Dr. Ismail Atash, who said that 3 men had been wounded; one lost two legs and two men had lost one leg each. One of the patients who had lost both legs above the knee was presently in theatre in this hospital.

SVA quickly joined the doctor in the operating theatre. According to the hospital staff the car was hit by a so-called **drone**, an unmanned airplane which bombed the car at approximately 12:00.

- **Physical/medical observations:** In theatre SVA observed this patient who lost both limbs above the knee. He was in a critical condition, very oedematous from crystalloid infusions since there was shortage of donor blood for transfusion.... The present doctors were debriding the stumps of both legs desperately. There was ongoing blood loss since both limbs were completely destroyed. After struggling for a time the patient had a cardiac arrest and further cardiopulmonary resuscitation was initiated but was unsuccessful. He was declared dead shortly after SVA left the operating theatre.
- **Material evidence:** Samples of this patient’s legs were taken; two bone specimens, one subcutaneous specimen, one skin specimen and a piece of the weapon, a disc which was lodged in the leg (see Appendix 3).

Photo 25a



Photo 25c



**Other amputation cases:**

**Photo 23**



**Photo 24**



## Types of Injuries: Burns

Special attention was given to burns due to reports of the use of white phosphorus, phosphorus observed in the air and on the ground, reports of phosphorus injuries, and finally the admission by the Israeli army of its use.

Due to the long time that had elapsed between the injuries and the arrival of the experts' team, it was not possible to tie specific observed burns injuries to white phosphorus with the technical resources available to the team. Indeed, it is unclear whether even advanced laboratory techniques can make such a connection at such a late stage since, ideally, identification should be made within hours of exposure.

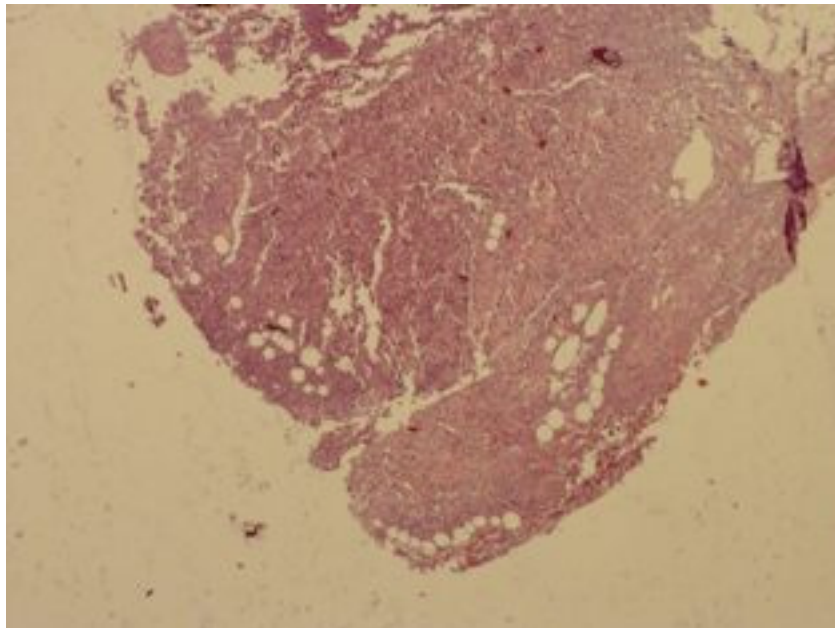
**Nonetheless the experts state that the reports of the doctors regarding burns treated are consistent with the use of white phosphorus.**

Moreover, 15 tissue samples were collected from burn victims, analysed by the team in local laboratories and then sent for further analysis in laboratories in Denmark and South Africa. Below is an example of a slide examined by the teams in laboratories in Gaza.

**Burns Microscopy: Photos by JT. Slide 1. Subcutaneous tissue from a male burn victim.**

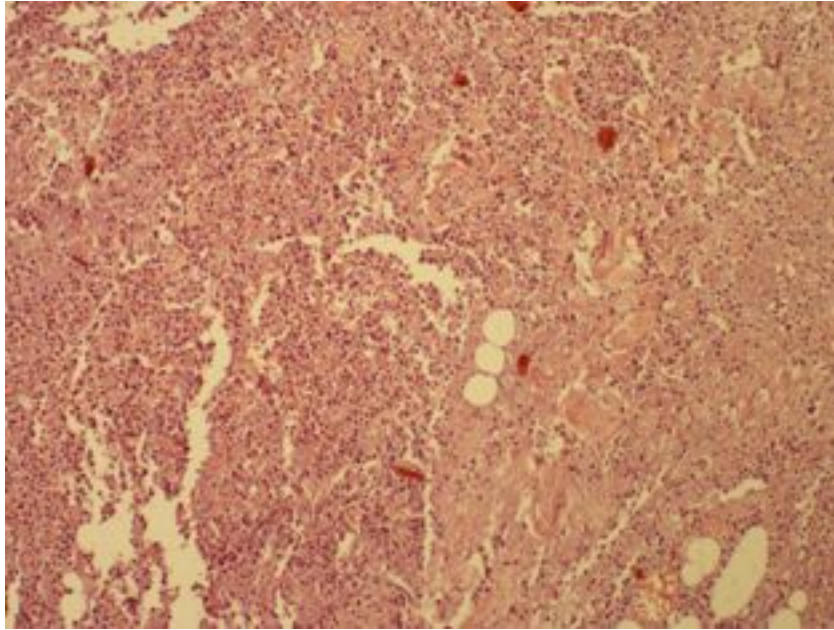
**Necrosis and inflammation. The photos are in no way proof of burn or phosphorus burn but fully consistent as they show necrosis and inflammatory reaction.**

**Photo M1**

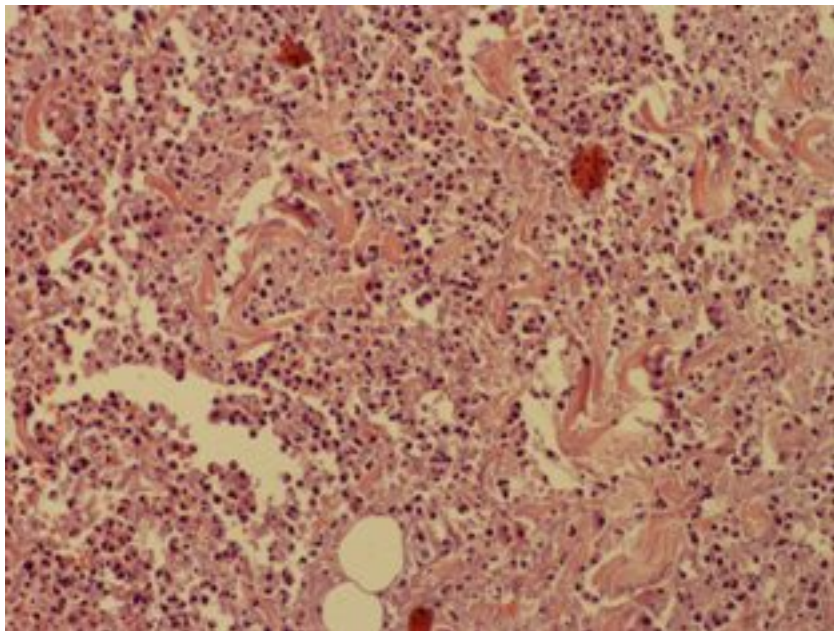




**Photo M2**



**Photo M3**



### **Types of Injuries: Secondary injury to civilians**

In the course of the mission the experts became aware that the attack had led to a total disruption of normal life for all civilians in the Gaza Strip. One of the manifestations of this was injuries caused at home as secondary effects of the attack. We have chosen to include these physical examinations and testimonies as an illustration of the usually unreported far-reaching consequences of the attack.

#### **Case Study – Hot water burns**

According to the patient's mother and aunt, this is a little 5 year old girl who was injured on the 5<sup>th</sup> January in an area close to the sea, called El-Mashta.

Because of the previous bombings there was neither electricity nor hot water available. The mother of IAA therefore boiled water on a make-shift heater in order to use the hot water to wash clothes.

It was in the evening, and IAA was playing with her brother in an adjacent room. The whole apartment was dark because of the electricity cuts.

When there was a sudden arrival of Helicopter(s) the girl panicked and ran to hide in the room her mother was busy in.

Unfortunately, because of the rush and the darkness she knocked over the pot with boiling water and was severely burned by the water, her trunk and both legs.

- **Physical examination: The burns are extensive and affect both thighs.**
- **Testimony taken at Shifa' Hospital, Gaza City, 1 Feb 2009.**

**Photo 27**



## **4. Attacks on civilians**

**Number of case studies in the report: 12**

### **Case Study – Abed Rabbo family**

The team visited the destroyed house of this family on 30 Jan 09.

On 2 Feb 2009 the team met with Souad Abed Rabbo in a private home in Gaza city, where an interview and medical examination was held.

According to Souad Abed Rabbo (54, T5 in the report), Israel soldiers called to the family to exit their house on 7 Jan 09. She, her daughter in law and her three granddaughters exited the house. Three of them were holding white flags.

“Outside the house there was an Israeli tank. It had come from the west towards the house that was facing north. It was 11.30 – 12.00. The tank was in the garden about ten meters from her, when she stopped to receive permission to leave unharmed. On her right side were the three girls, behind her was the daughter in law close to the door of the house. The soldier on the tank never replied. They were looking into each

others' eyes for 7-10 minutes, when suddenly a soldier opened fire and shot the granddaughter of the witness, Souad, in the neck and chest. She died immediately. They also shot Amal. She was hit in the chest and abdomen, and the interviewee saw her intestines come out. Amal died a little later. The daughter in law ran immediately into the house and was not hurt. The witness Souad Abed Rabbo was hit twice, as she turned around in a clockwise movement. She was hit in the left arm and in the left buttock. She did not see who shot. She assumed that the shots were fired from gun(s) not from the tank, but she was not certain. She saw three soldiers on top of the tanks holding weapons. She felt, as if her left hand fingers were frozen, but she did not at the time feel the gunshot lesion in the buttock and flank. Samar was hit in the chest with the bullet coming out of the back. She had a lesion of the spine and was at the time of the interview in a hospital in Belgium suffering paralysis....”

- **Medical records:** Copies of the hospital records of the interviewee and her granddaughters were given to SAW by Shifa hospital. JT: the hospital records had erroneously mistaken Amal for Souad (the granddaughter) and vice versa...
- **Physical examination by JT:** The witness Souad Abed Rabbo was partly undressed with the help of her daughter. She was an obese woman lying most of the time on her back on a sofa.
- On her left arm she had two lesions, almost completely healed. On the “extensor side” of the lower arm, about 10 cm below the elbow joint, a sutured wound about 3 cm in transverse measure and less than one cm in vertical measure. The other lesion was a likewise almost healed, sutured wound in the “cubital fossa” with almost the same dimensions as the other wound.
- **Interpretation by JT:** Fully consistent with a gunshot lesion from 7 Jan 2009. Entrance and exit wound cannot be determined.
- On her left buttock she had a healing wound the diameter about 1 cm. On the abdominal wall a little to the left and a few cm below the umbilicus she had an irregular wound that had probably been sutured. It measured 3 cm in transverse direction and about 1 cm vertically.
- **Interpretation by JT:** The wounds were fully consistent with being caused by one gunshot with entrance in the buttock, direction forward, a little upwards and a little to the right. The weapon may well have been a rifle, the bullet of not very large caliber.

**Photo 5a**



**Photo 5b**





**Photo 5d**



## Attacks on Civilians: Attacks during the truce

### Case Study – MAH.

MAH lived in Gaza City with his family, the father who was director of Palestinian Bank, 55, the mother, a brother, 24, a brother, 19 and a sister, 14....When the truce was supposed to have started at 11 am on 15 Jan 2009, the remaining five family members went down the stairs to their car. The father was carrying 140.000 US dollars that he was guarding for bank customers. As soon as they were inside the car it was hit – probably from the air - altogether they were hit three times, possibly once from a tank, M did not see that. At the first hit towards the car he was thrown out of the car, and he said witnesses told him that he tried to crawl back into the car, perhaps in order to save the family. They all burnt to death however. He and the 19 year old were the only survivors of the family. The money also burned completely. It was said that the fire burned for 6 hours.

- **Testimony of MAH, 25, Shifa hospital Gaza City, 1 Feb 2009.**
- **Physical examination:** By examination the team saw a young man heavily influenced by the injuries and the loss of his family, but still able to tell the story and even smile.  
He was missing two teeth in his right upper jaw, detailed examination was not possible as he wore tight metal braces due to his mandibular fracture. The left eye was destroyed. He had bandages on part of his arms and on his legs. X-ray photos allegedly taken at admission showed several foreign bodies in the head, the neck and the thorax (breast).  
About half an hour after the examination the dressing was changed, and the team saw the burns of the right leg. The skin defect stretched from the hip to the foot, including



part of the foot and was present on the outer/dorsal side of the leg. The wound was deep and had a foul smell, possibly indicating infection. There was scattered granulation tissue as a sign of incipient healing. The wound margins were sharply demarcated, probably due to treatment.

- **Overall impression and conclusion on MAH:** His story was fully consistent with the events known to have happened, and his lesions may well be caused in the way that he described.
- It was not possible to determine if the wounds had been caused by phosphorus burns.
- **Medical files retained in the offices of PHR-Israel**

**Photo 42a**



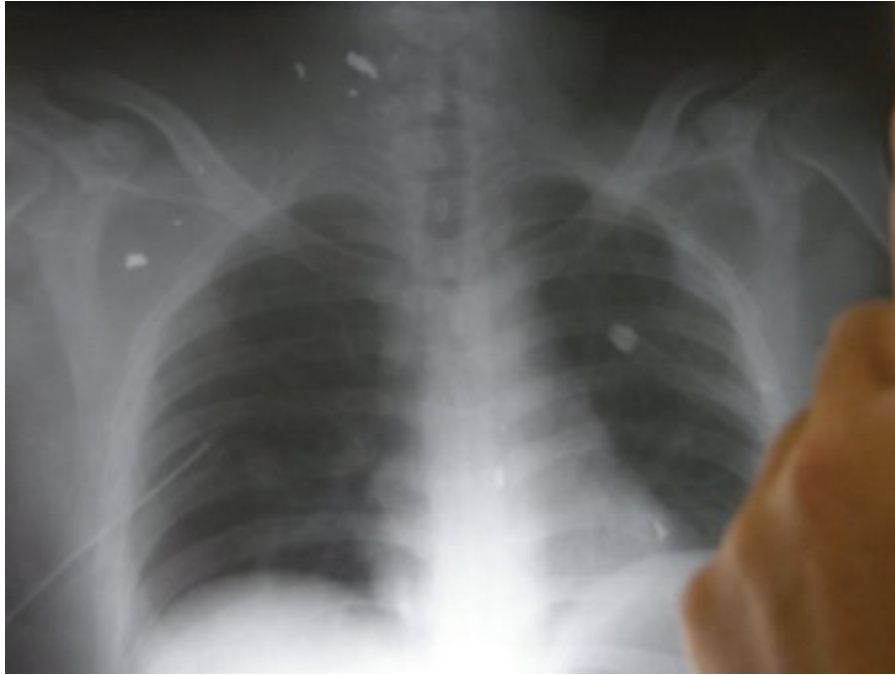
**Photo 42b**



**Photo 42c**



**Photo 42d**



**Photo 42e**



## 5. Public health and environment

During the attacks many people reported long lasting electricity cuts in densely populated residential areas, meaning that water pumps could not work and water was not available in buildings which depend on pumps for water supply. It is obvious that the water supply system was destroyed where buildings and entire residential areas were destroyed.

- **Photo: Sheikh Zayed residential area in Beit Lahiya.** A bomb crater can be seen on a spot at some distance from residential buildings, where two important water supply tubes cross. The bomb attack occurred on 29<sup>th</sup> December 2009 by an F 16 aircraft. Water supply was interrupted to many residences (Photo PH1, 3.2.09)

**Photo PH1**



### Public health: Healthcare services

The attacks caused a temporary disruption of the regular public healthcare system. Many health centres could not be reached, some were attacked or destroyed. Medical staff had to be concentrated in hospitals for the treatment of severely injured people. People with chronic diseases receive their necessary drugs in most cases for an entire month but dangerous interruptions of treatment have most probably occurred. We have not been able to assess the magnitude of this problem during the time of the mission.

There several reports of pregnant women no longer feeling fetal movement or vaginal bleeding because of psychological trauma caused by the attacks. Four cases of intrauterine death occurred during the attacks, which could not be attributed to any other reason.



**Photo PH2**



**Photo PH3**



## Public health: Referrals of the wounded to Egypt

The total number of patients arriving in Egypt from Gaza, from the beginning of the Israeli Offensive until 07.03.2009, was 1146. Most of these were injured, but from the 15 of January on, many cases of sick patients made their way into the Egyptian Hospitals. The Ministry of Health accepted them together with the injured, because they were aware of the difficulties of chronic patients both to get their treatment in Gaza and to go abroad for treatment via Erez Crossing. 43 patients died in Egypt.

## 6. Atypical weapons

- Samples of suspected DIME or other unknown weapons



No clear medical cases were observed by the team that suggested the use of DIME (**Dense Inert Metal Explosion**). However with the aid of the Department of Environment and Earth Sciences, The Islamic University, Gaza, samples were collected of soil, water, slush and grass suspected to be contaminated by unknown weapons, which could be DIME or other types of e.g. chemical weapons. Please see Appendix 2 for the list of samples sent for analysis in the UK.

## 7. General impressions and conclusion

- “The underlying meaning of the attack on the Gaza Strip, or at least its final consequence, appears to be one of creating terror without mercy to anyone. Nearly all the people we spoke to slept cuddled together with the other members of their family in a central room of the house during the three weeks of attack. No one knew where or when the next bomb or explosion would occur. It appears that the wide range of attacks with sophisticated weaponry was predominantly focussed on terrorising the population. ...”
- “The patterns of injuries, many of which were apparently caused by anti-personnel weapons, are characterized by a high proportion of maiming and amputations, which will cause lifelong disabilities for many.”
- “There is absolutely no doubt that the number of medical institutions, such as hospitals and mobile clinics were specifically targeted including a large number of ambulances. ...”
- There were many stories about patients who were prohibited from being evacuated by ambulances for medical care for their wounds. A number of patients died as a result of the delay in transportation to a medical institution....”
- “Besides the large-scale, largely impersonal destruction that the team witnessed and heard of, it was especially distressing to hear of individual cases in which soldiers had been within seeing, hearing and speaking distance of their victims for significant stretches of time, but despite the opportunity for ‘humanisation’, had denied wounded people access to lifesaving medical care, or even shot at civilians at short range....”

### Legal Analysis by *Magali Jandaud*

The unwarranted killing of the civilians or wounded, torture or inhuman treatment, direct attacks on civilian population, or extensive destruction of property, denial of medical care, are constitutive elements of war crimes, according to the Fourth Geneva Convention (Art 85, 147), for which High Contracting Parties have to ensure respect (Art 1), search and prosecute perpetrators of grave breaches (Art. 146).

- Original initiatives such as the creation of the symbolic Russell Tribunal are worth mentioning considering the general climate of silence and impunity.
- States are under the obligation to prosecute or extradite persons suspected of having committed war crimes on their territory. Individuals can also be prosecuted on the basis of universal jurisdiction or when Geneva Conventions are transposed into national legal systems.

- The International Criminal Court (ICC) Rome Statute was not ratified by Israel (the Palestinian Authority ratified it shortly after the end of Cast Lead Operation but it is not a recognised State). However, the UN Security Council could refer the case directly to the ICC. Alternatively if certain perpetrators happen to hold the nationality of a signatory state (Art 25 ICC Statute), they could be sued there.
- On 10 February 2009, UN Secretary-General Ban Ki-Moon announced the opening of an investigation following the attacks of UNWRA protected compound and schools, which seems quite insufficient considering the UN mandate.
- As stated in the recent letter sent by Human Rights Watch to EU Foreign Ministers (<http://www.hrw.org/en/node/81557/>) and in order to avoid double standards in the administration of international justice, the EU should be in a position to press the UN for an international impartial investigation of allegations of serious violations of international law.
- The International Humanitarian Fact-Finding Commission is also a permanent body available to the international community to investigate grave violations of international humanitarian law (although not recognized by Israel).

As IDF soldiers' grim testimonies start being revealed, all existing accountability mechanisms should be used in order to shed light on the alleged crimes perpetrated in Gaza and allow judicial redress for the victims of the conflict.