Off Target
The Conduct of the War
and Civilian Casualties in Iraq

Human Rights Watch

New York  Washington  London  Brussels
I. SUMMARY AND RECOMMENDATIONS

Principal Findings

U.S. President George W. Bush called the war in Iraq “one of the swiftest and most humane military campaigns in history.”[1] Yet thousands of Iraqi civilians were killed or injured during the three weeks of fighting from the first air strikes on March 20 to April 9, 2003, when Baghdad fell to U.S.-led Coalition forces.

Human Rights Watch conducted a mission to Iraq between late April and early June 2003 with two objectives: (1) to identify and investigate potential violations of international humanitarian law (IHL) by the parties to the conflict, and (2) to identify patterns of combat by those parties which may have caused civilian casualties and suffering that could have been avoided if additional precautions had been taken.

Human Rights Watch did not undertake this mission to determine the number of civilian casualties. Rather, it sought to understand how and why civilians were killed or injured in order to assess compliance with international humanitarian law, with a view to lessening the impact of war on civilians in the future.

The investigation showed that Iraqi forces committed a number of violations of international humanitarian law, which may have led to significant civilian casualties. These violations included use of human shields, abuse of the red cross and red crescent emblems, use of antipersonnel landmines, location of military objects in protected places (such as mosques, hospitals, and cultural property), and a failure to take adequate precautions to protect civilians from the dangers of military operations. The Iraqi military’s practice of wearing civilian clothes tended to erode the distinction between combatants and civilians, putting the latter at risk, although it did not relieve Coalition forces of their obligation to distinguish at all times between combatants and civilians and to target only combatants.

U.S.-led Coalition forces took precautions to spare civilians and, for the most part, made efforts to uphold their legal obligations. Human Rights Watch nevertheless identified practices that led to civilian casualties in the air war, ground war, and post-conflict period.

The widespread use of cluster munitions, especially by U.S. and U.K. ground forces, caused at least hundreds of civilian casualties. Cluster munitions, which are large weapons containing dozens or hundreds of submunitions, endanger civilians because of their broad dispersal, or “footprint,” and the high number of submunitions that do not explode on impact. U.S. Central Command (CENTCOM) reported that it used 10,782 cluster munitions, which could contain at least 1.8 million submunitions. The British used an additional seventy air-launched and 2,100 ground-launched cluster munitions, containing 113,190 submunitions. Although cluster munition strikes are particularly dangerous in populated areas, U.S. and U.K. ground forces repeatedly used these weapons in attacks on Iraqi positions in residential neighborhoods. Coalition air forces also caused civilian casualties by their use of cluster munitions, but to a much lesser degree.

Many of the civilian casualties from the air war occurred during U.S. attacks targeting senior Iraqi leaders. The United States used an unsound targeting methodology that relied on intercepts of satellite phones and inadequate corroborating intelligence. Thuraya satellite phones provide geo-coordinates that are accurate only to within a one-hundred-meter (328-foot) radius; therefore, the United States could not determine the origin of a call to a degree of accuracy greater than a 31,400-square-meter area. This flawed targeting strategy was compounded by a lack of effective assessment both prior to the attacks of the potential risks to civilians and after the attacks of their success and utility. All of the fifty acknowledged attacks targeting Iraqi leadership failed. While they did not kill a single targeted individual, the strikes killed and injured dozens of civilians. Iraqis who spoke to Human Rights Watch about the attacks it investigated repeatedly stated that they believed the intended targets were not even present at the time of the strikes.

Coalition air strikes on preplanned fixed targets apparently caused few civilian casualties, and U.S. and U.K. air forces generally avoided civilian infrastructure. Coalition forces did, however, identify certain targets as “dual use,” including electricity and media installations. Human Rights Watch’s investigations found that air strikes on civilian power distribution facilities in al-Nasiriya caused serious civilian suffering and that the legality of the attacks on media installations was questionable.

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Most of the civilian casualties attributable to Coalition conduct in the ground war appear to have been the result of ground-launched cluster munitions. In some instances of direct combat, especially in Baghdad and al-Nasiriyya, problems with training on as well as dissemination and clarity of the rules of engagement (ROE) for U.S. ground forces may have contributed to loss of civilian life.

Explosive remnants of war (ERW) caused hundreds of civilian casualties during and after major hostilities and continue to do so today. The Coalition left behind many tens of thousands of cluster munition “duds,” i.e. submunitions that did not explode on impact and which then became de facto landmines. If the average failure rate were 5 percent, the number of cluster munitions Coalition forces reported using would leave about 90,000 duds. The humanitarian and military harm they caused has led even some of the soldiers who fought in Iraq to call for an alternative to a weapon that produces so many duds. Meanwhile, Iraqi forces abandoned staggering quantities of arms and ammunition that have injured or killed civilians searching for playthings or scraps to sell or reuse.

U.S. and U.K. military and civilian leaders have repeatedly stressed their commitment to avoiding civilian casualties and other harm to civilians. Neither country, however, does an adequate job of investigating and analyzing why civilian casualties occur. That job, left largely to organizations like Human Rights Watch, should be the responsibility of parties to the conflict. Having the capability to do this kind of assessment, the United States and United Kingdom should accurately account for the civilian casualties they cause in armed conflict so that they can provide maximum protection to civilians in any future conflict.

**International Humanitarian Law**

During the war in Iraq, Coalition and Iraqi forces were bound by international humanitarian law, also known as the law of armed conflict. IHL requires parties to an armed conflict to respect and protect civilians and other persons not or no longer taking a direct part in hostilities. It also limits permissible means and methods of warfare. Especially relevant are the four Geneva Conventions of 1949, to which Iraq, the United States, and the United Kingdom are party. Also applicable are the 1907 Hague

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Regulations, ratified by the United States and the United Kingdom and widely accepted as representing customary international law.\(^4\)

Neither Iraq nor the United States have ratified the First Additional Protocol of 1977 to the 1949 Geneva Conventions (Protocol I), though the United Kingdom is a party.\(^5\) Protocol I codified and in some measure expanded upon existing law, particularly relating to the conduct of hostilities. Today, many, if not most, of its provisions are considered reflective of customary international law.\(^6\)

The principle of distinction is the keystone of the law regulating conduct of hostilities. It requires parties to a conflict to distinguish at all times between combatants and civilians. Civilians and civilian objects may not be attacked, and operations may only be directed against military objectives.\(^7\)

Military objectives are members of the armed forces, other persons taking a direct part in hostilities for the duration of their participation, and “those objects which by their

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\(^6\) The U.S. military considers “evidence of the customary law of war arising from the general consent of States,” as that which “may be found in judicial decisions, the writings of jurists, diplomatic correspondence, and other documentary material concerning the practice of States.” U.S. Army Field Manual, FM 27-10, The Law of Land Warfare, July 18, 1956, art. 6. In 1987, then U.S. State Department Deputy Legal Advisor Michael Matheson publicly enumerated many of the principles enshrined in Protocol I that the United States considers customary international law. Among them are: limitations on the means and methods of warfare, especially those methods which cause superfluous injury or unnecessary suffering (art. 35); protection of the civilian population and individual citizens, as such, from being the object of acts or threats of violence, and from attacks that would clearly result in civilian casualties disproportionate to the expected military advantage (art. 51); protection of civilians from use as human shields (arts. 51 and 52); prohibition of the starvation of civilians as a method of warfare and allowing the delivery of impartial humanitarian aid necessary for the survival of the civilian population (arts. 54 and 70); taking into account military and humanitarian considerations in conducting military operations in order to minimize incidental death, injury, and damage to civilians and civilian objects, and providing advance warning to civilians unless circumstances do not permit (arts. 57-60). Michael J. Matheson, Remarks on the United States Position on the Relation of Customary International Law to the 1977 Protocols Additional to the 1949 Geneva Conventions, reprinted in “The Sixth Annual American Red-Cross Washington College of Law Conference on International Humanitarian Law: A Workshop on Customary International Law and the 1977 Protocols Additional to the 1949 Geneva Conventions,” American University Journal of International Law and Policy, vol. 2, no. 2, Fall 1987, pp. 419-27.

\(^7\) Protocol I, art. 48.
nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.”

In addition to direct attacks against civilians, IHL also prohibits indiscriminate attacks. These are attacks “of a nature to strike military objectives and civilians or civilian objects without distinction.” Examples of indiscriminate attacks are those that “are not directed at a specific military objective” or that use means that “cannot be directed at a specific military objective.”

Also indiscriminate are attacks which violate the principle of proportionality because they are “expected to cause incidental loss of civilian life, injury to civilians [or] damage to civilian objectives . . . which would be excessive in relation to the concrete and direct military advantage anticipated” from that attack.

In the conduct of military operations, constant care must be taken to spare the civilian population and civilian objects from the effects of hostilities. Parties to a conflict are therefore required to take precautionary measures with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians, and damage to civilian objects. These precautions include:

- Doing “everything feasible to verify” that the objects to be attacked are military objectives and not civilians or civilian objects or subject to special protection.
- Taking “all feasible precautions in the choice of means and methods” of warfare so as to avoid and in any event minimize “incidental loss of civilian life, injury to civilians and damage to civilian objects.”
- Refraining from launching attacks “expected to cause incidental loss of civilian life, injury to civilians, [or] damage to civilian objects . . . which would be excessive in relation to the concrete and direct military advantage expected.”
- When circumstances permit, giving “effective advance warning . . . of attacks which may affect the civilian population.”

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8 Ibid., arts. 51(3), 52.
9 Ibid., art. 51(4).
10 Ibid., art. 51(4)(a, b).
11 Ibid., art. 51(5)(b).
When a choice is possible between several military objectives for obtaining the same military advantage,” carrying out the attack that may be “expected to cause the least danger to civilian lives and civilian objects.”

- Avoiding “locating military objectives within or near densely populated areas.”
- Endeavoring “to remove the civilian population . . . from the vicinity of military objectives.”

Parties to a conflict are also prohibited from using civilians “to shield military objectives from attacks” or using their presence “to shield, favour or impede military operations.”

Medical establishments and cultural property benefit from special protection under international humanitarian law. Hospitals and other medical units must be “respected and protected” and must not be the object of attack. They must not be used “to shield military objectives from attack.” They lose this protection, however, if they are used to commit “acts harmful to the enemy.”

Parties to a conflict must also refrain from committing hostile acts against “historic monuments, works of art or places of worship which constitute the cultural or spiritual heritage of peoples . . . [or] to use such objects in support of military effort.”

**Methodology**

Human Rights Watch has conducted several battle damage assessment (BDA) missions in the past to investigate the conduct of war and civilian casualties, including in Yugoslavia in 1999 and Afghanistan in 2002. While the military conducts such assessments to determine the military success of an operation, Human Rights Watch reviews the same incidents from an IHL perspective. For this mission to Iraq, Human Rights Watch conducted its research in three phases: pre-mission, on mission, and post-mission.

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12 Protocol I, arts. 57, 58.
13 Ibid., art. 51(7).
14 Ibid., art. 12.
15 Ibid., art. 13.
16 Ibid., art. 53. See also the 1954 Convention for the Protection of Cultural Property in the Event of War, which has been ratified by Iraq.
Pre-Mission

During the active phase of hostilities, Human Rights Watch monitored press reports from around the world of civilians injured or killed by the fighting. It examined each report for the location, date, and time of the incident as well as the tactics and weapons employed and the military forces involved. The reports were compiled into an electronic database on a daily basis, which helped Human Rights Watch researchers to determine the initial sites for inspection and analysis inside Iraq. The pre-mission work also included the creation of ArcView geographic information software (GIS) customized maps of Iraq and its major cities. These digitized maps would be used to display data collected inside Iraq of the precise location of various objects and events.

On Mission

Human Rights Watch sent a team of three researchers to Iraq between April 29 and June 1, 2003, to investigate the effect of the air war, ground war, and the immediate post-combat environment on civilians. The team included a senior military analyst and Iraq expert, a lawyer with expertise in international humanitarian law and the use of cluster munitions, and a principal researcher. All three had previous experience with this kind of research. The team focused on the main areas of fighting in the Tigris and Euphrates river valleys where civilian deaths were reported. Guided initially by their press report database and later by information they received from sources inside Iraq, the team visited ten cities, including Umm Qasr, al-Fao, Basra, al-Nasiriyya, al-Shatra, Baghdad, al-Hilla, Karbala’, al-Najaf and al-Falluja. It obtained data about the location of cluster munition strikes from the Humanitarian Operations Center (HOC) in Kuwait, plotted those strikes in ArcView, and visited many of the sites located in populated areas. The team traveled freely both within and between cities by private vehicle, unarmed and without military escort.

At each of the sites visited, the team attempted to investigate three sources of information: ballistics, belligerents, and the victims.

- **Ballistics:** Ballistic evidence included blast and fragmentation damage and, especially in the case of cluster munitions, pieces of weapons; this information helped the team

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17 Before coming to Human Rights Watch, Senior Military Analyst Marc Garlasco worked as an intelligence officer on Iraq in the U.S. Defense Intelligence Agency. He did a battle damage assessment for the Pentagon in Kosovo. All the findings in this report are based on work he did after joining Human Rights Watch. Bonnie Docherty, lawyer and researcher, and Reuben E. Brigety, II, former researcher, conducted a battle damage assessment for Human Rights Watch in Afghanistan in March 2002.
determine the weapons used in a particular incident and the manner in which they were employed.

- **Belligerents:** The team attempted to interview soldiers from all parties to an incident who could provide information about how they fought particular engagements, including details on the weapons and tactics they used, the behavior they observed from the enemy, and the presence of civilians at the time of the attack.

- **Victims:** The team interviewed victims and witnesses of attacks that harmed civilians to gather information about the time, date, location, and nature of incidents. They also reviewed thousands of medical records at more than a dozen hospitals in the cities they visited and interviewed medical personnel at those facilities.

In addition, at each site, the team recorded the precise global positioning system (GPS) coordinates of important locations—such as debris fields, bomb craters, shrapnel and small-arms damage, location of Coalition and Iraqi forces according to witness testimony, places of civilian deaths or injuries—with hand-held Garmin GPS units. The team also took thousands of digital photographs to analyze in conjunction with the evidence described above.

It must be stressed that, with one exception, Human Rights Watch was unable to interview members of the Iraqi armed forces in order to get their response to accusations of violations of IHL and their views on how the Coalition forces fought. This report does not assess the military advantage of any particular attack it describes. Parties to an armed conflict must carry out this assessment on a case-by-case basis before each attack.

**Post-Mission**

After returning from Iraq, the team compiled and analyzed all of the information it gathered during the mission. It also conducted follow-up interviews with relevant U.S. and U.K. officials.

**Civilian Casualties**

Human Rights Watch did not attempt to quantify civilian deaths in Iraq. Although an overall number would be useful in order to understand fully the impact of the war and to perform comparative analyses with other recent conflicts, we believe it is more important to understand the circumstances that led to civilian casualties.
Human Rights Watch researchers went to many of the hospitals in the ten cities and numerous small towns they visited during the mission. Hospital directors and medical personnel who had been working in these facilities during the conflict made Iraqi medical records available. These records allowed the researchers to draw some statistical conclusions, but they also highlighted the challenges in attempting an accurate count of civilian casualties.

The quality of the records varied from detailed computerized hospital forms to bloodstained notebooks with hand-written notes. While some medical facilities were able to keep comprehensive records, others had incomplete records with sections missing. Understandably, during active military operations, record keeping was not always the highest priority. This is one reason that the total number of civilian casualties in Iraq will never be accurately known. Another challenge to quantifying Iraqi civilian casualties is that in this Muslim nation the dead are buried almost immediately. Though hospitals have records of some of the deaths in the war, a certain percentage of casualties, due to religious customs, were not taken to hospitals, not even to obtain death certificates. Finally, as in any war, in some instances, there were few if any remains by which to identify the dead.

Though a complete accounting of civilian casualties may not be possible, some attempts to quantify the dead have been made. The Associated Press canvassed sixty of Iraq’s 124 hospitals immediately after the end of major combat operations and calculated that at least 3,420 civilians died. The Associated Press described the count as “fragmentary” and said, “the complete toll—if it is ever tallied—is sure to be significantly higher.” The Los Angeles Times did a survey of twenty-seven hospitals in Baghdad and outlying areas and found that at least 1,700 civilians died and more than 8,000 were injured in the capital.

Statistics drawn from hospital records indicate that the ground war caused the vast majority of the deaths. More than 400 civilians died in al-Nasiriyya, including at least 72 women and 169 children; more than 700 additional women and children were injured. The preponderance of these casualties was due to small arms fire as the battle raged in a densely populated neighborhood of the city. Baghdad had similarly high casualties from ground fire. In al-Hilla, U.S. ground-launched cluster munitions caused 90 percent of all

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18 See appendices on civilian casualties in al-Hilla, al-Najaf, and al-Nasiriyya.
civilian casualties. These weapons killed large numbers of civilians in Basra and Baghdad as well. While the ground war caused significantly more casualties, the air war, especially failed attacks targeting Iraqi leadership, contributed to the total number of civilian deaths and injuries.

*Ali Kadhim Hashim stands in front of the rubble where his family was killed in a U.S. Marine helicopter attack in al-Nasiriyaa. Fourteen members of his family died in the home on March 23, 2003, including his parents, his wife, and his children. © 2003 Reuben E. Brigety, II / Human Rights Watch*

**Major Recommendations**

Human Rights Watch makes the following major recommendations to the United States, the United Kingdom, and other Coalition forces:

- Air attacks on leadership targets, like those launched in Iraq, should not be carried out until the intelligence and targeting failures have been corrected. Leadership strikes should not be carried out without an adequate collateral damage estimate (CDE); strikes should not be based solely on satellite phone intercepts; and there should be no strikes in densely populated areas unless the intelligence is considered highly reliable.
• A thorough investigation of the collateral damage and battle damage assessment processes should be carried out to determine how they can be improved to reduce civilian casualties, and appropriate changes should be implemented.

• There should be no use of air- or ground-delivered cluster munitions until the humanitarian problems associated with these weapons are resolved. In particular, their use should be suspended until the dud rate can be reduced dramatically. If cluster munitions are employed, they should not be used in or near populated areas. Stocks of older, highly unreliable and unguided cluster bombs should not be used under any circumstances.

• Precision-guided munitions (PGMs) should be used whenever possible, especially on targets in populated areas.

• Extreme caution must be used in the targeting of electrical power facilities. In particular, electrical generation facilities should not be attacked at all. If electrical distribution facilities are attacked, it should be done in such a way as to cause only temporarily incapacitation.

• Media installations should not be attacked unless it is clear that they make an effective contribution to military action and their destruction offers a definite military advantage.

• Armed forces should conduct better training on the application of rules of engagement, especially in urban warfare and in circumstances where the enemy may be wearing civilian clothes. The U.S. military should ensure that there is no confusion between written and verbal rules of engagement and that ROE are distributed in a timely fashion.

• More planning, personnel, and resources need to be devoted to dealing with unexploded ordnance and abandoned stockpiles of arms and ammunition both during conflict and immediately afterward.