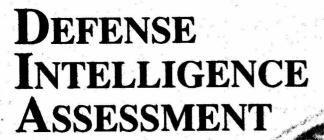
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(b)(3):10 USC 424

July 1999 DI-1813-IZQ-99





Health Services Assessment: Iraq (U)

Derived from: Multiple Sources

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Date of Source: November 1994

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Defense Intelligence Assessment

Health Services Assessment: Iraq (U)

Information Cutoff Date: 1 January 1999

This document, published under the auspices of the Department of Defense Intelligence Production Program (DoDIPP), reflects the Defense Intelligence Production Community position. The Defense Intelligence Agency's Armed Forces Medical Intelligence Center produced it as the designated DoDIPP producer for this subject.

Prepared by: (b)(3):10 USC 424

Medical Capabilities Division Armed Forces Medical Intelligence Center Defense Intelligence Agency

This publication supersedes Health Services Assessment Iraq (U), PC-1810-IZ-95, September 1995, and Military Capabilities Study: Republic of Iraq, Appendix B - Medical Capabilities (U), DOD-1540-IZ-98, November 1997, which should be destroyed.

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This product addresses the interests of the US Army Medical Center and School, as indicated in standing production requirement C464-SR-0001.

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Date of Source: November 1994

DI-1813-IZQ-99

Health Services Assessment: Iraq (U)

Key Judgments

(b)(1),1.4(c)

- (U) Civilian and military medical personnel are poorly trained.
- (U) Any event resulting in mass casualties would quickly overwhelm the civilian and military health care systems.

(b)(1),1.4(c)

(U) Military medical facilities provide better care than government medical facilities, although the quality of care is considerably lower than that provided in Western countries.

(b)(1),1.4(c)

(U) Humanitarian operations and medical supplies obtained under the UNSCRs will continue to benefit the military while providing minimal medical assistance to Kurds and Shia.

(b)(1),1.4(c)

Information Cutoff Date: 1 January 1999

-Derived from: Multiple Sources

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DI-1813-IZQ-99

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Health Services Assessment: Iraq (U)

Foreword

- (U) The Health Services Assessment (HSA) is an all-source intelligence evaluation of a country's capability to provide medical services and support to its military forces and civilian population. It addresses key elements of civilian and military medical services, civilian medical service support to military forces, the status of health services, emergency medical response capabilities, key medical treatment facilities, social factors affecting health care, and the country's requirements for outside medical assistance. Important trends are highlighted.
- (U) The purpose of the assessment is twofold: (1) to assist in medical planning and decision-making for military operations, disaster assistance, humanitarian aid, and foreign assistance; and (2) to assist the military planner in developing assessments on the capability of the country to sustain its combat forces in time of war.
- (U) The most current intelligence regarding infectious disease and environmental health risks is available by contacting AFMIC directly at

(b)(3):10 USC 424,(b)(3):50 USC 403-1(i)

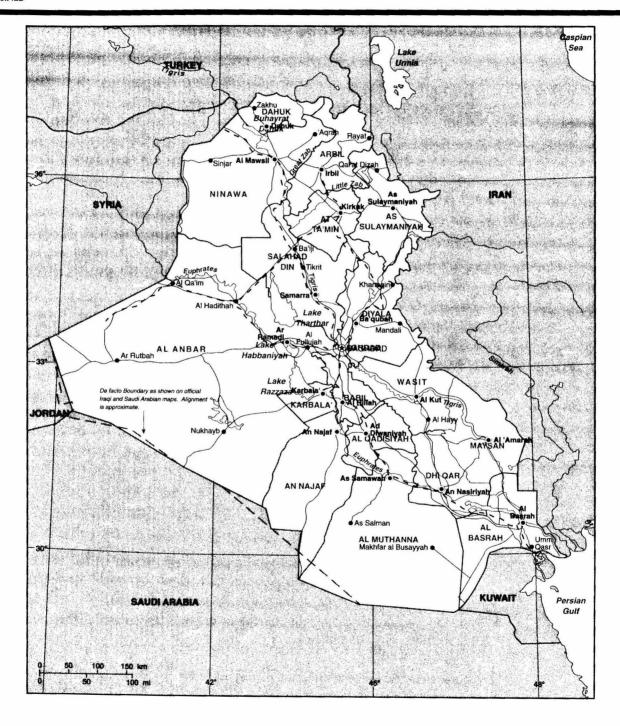
- (U) Request any amplification of subject matter, constructive criticism, comments, or suggested changes be forwarded to the Director, Armed Forces Medical Intelligence Center, 1607 Porter Street, Fort Detrick, MD 21702-5004.
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Health Services Assessment: Iraq (U)

Civilian Health Care

- (U) Following the Iran-Iraq War during the 1980s and Operation DESERT STORM in 1991, Iraq's health care system can barely provide basic health care services. Currently, armed struggles continue in southeastern and northern Iraq. These conflicts and United Nations sanctions have severely crippled Iraq's medical infrastructure, especially the civilian sector.
- (U) Although passed in April 1995, Iraq did not accept United Nations Security Council resolution (UNSCR) 986, which allows the sale of Iraqi oil to purchase medical materiel, until December 1996. Saddam Husayn's delayed acceptance of the resolution unnecessarily worsened military and civilian medical supply shortages. Husayn uses and likely will continue to use the UNSCRs for propaganda and personal gain at the expense of Iraqi lives, especially Kurds and Shia.
- (U) Future capabilities of the Iraqi health care system will depend on foreign medical aid and the UNSCRs. Meanwhile, Iraqis will continue to die because of a lack of basic health care, proper nutrition, and preventive medicine and public health programs.

Organizational Effectiveness

- (U) While well organized, the health care system does not function effectively because of a severe lack of medical resources. Medical care generally is restricted to major urban areas, and the best tertiary care is economically restricted to wealthy Iraqis.
- (U) The health care system is set up in tiers, which are linked by a referral and supervision arrangement (Figure 1). The Ministry of Health (Saadoun Street, Baghdad; telephone 776-1970) maintains liaisons with the ministries of defense, agriculture, interior, labor, and

social affairs, the Red Crescent Society, and the Scientific Planning Board. The medical system depends heavily on procuring medical supplies through the UNSCRs and humanitarian donations from foreign governments and nongovernmental organizations (NGOs).

(U) Nearly two-thirds of physicians, almost all nurses, and more than one-half of all hospital beds are located in Baghdad, which contains only 27 percent of the Iraq's population. Most civilian medical facilities countrywide are operating below 70 percent capacity because of severe medical materiel and personnel shortages.

Quality of Medical Personnel

(U) Medical personnel are poorly trained. Medical training is heavily oriented toward didactic instruction, with little hands-on or practical clinical training. Moreover, the departure of experienced Iraqi instructors and severe shortages of educational materials greatly reduce the quality of instruction. Shortages of functioning automated diagnostic equipment, ranging from blood counters to x-ray machines, drastically limit physicians from making rapid, accurate diagnoses.

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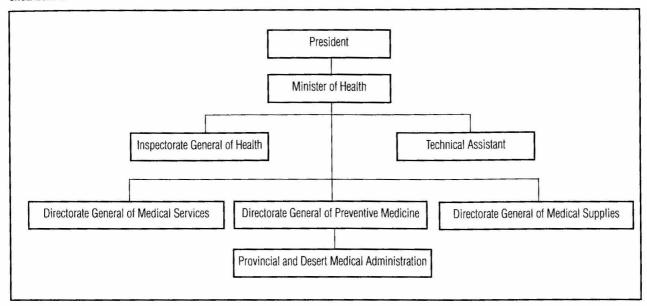


Figure 1. (U) Organization of the Ministry of Health.

(b)(1),1.4(c)

(U) Technicians and paramedical personnel are deficient in their ability to operate and maintain diagnostic and treatment equipment. Consequently, physicians must rely on their clinical expertise and slower, less accurate manual diagnostic tests. This reliance on manual tests contributes to misdiagnoses and delayed test results, resulting in marginal medical care followed by increased morbidity and mortality.

Quality of Medical Treatment Facilities

(U) Private hospitals offer the best medical care in Iraq and are better equipped than their government counterparts. However, the quality of all health care is below Western standards. Moreover, all Iraqi hospitals function well below acceptable US sanitary standards.

(b)(1),1.4(c)

(b)(1),1.4(c)

(U) The national health care budget does not provide sufficient funding to repair and renovate medical facilities. Moreover, few hospitals have reliable, functional diagnostic equipment because of a lack of spare parts and dependable power supplies. Few hospitals have functional emergency generators.

Medical Materiel

(U) Iraq cannot produce or obtain adequate supplies of medical materiel. Under Phase IV (November 1998 to April 1999) of UNSCR 986, the medical sector was allocated only \$240 million for medical materiel, which is not adequate for the country's needs. Shortages of medical materiel are worsened by the long period between ordering and receipt of medical items, hoarding of supplies by the military, and Baghdad's June 1998 decision to stop accepting donated humanitarian aid. The shortages will continue unless the United Nations allocates additional funds and Iraqi medical materiel production capabilities are restored to pre-1990 levels.

- (U) Iraq's medical materiel procurement and distribution system is very centralized. The State Company for Drugs and Medical Appliances, known as KIMADIA, procures all medical equipment and pharmaceuticals. KIMADIA is a government agency subordinate to the Ministry of Industry and Minerals. Along with procurement, KIMADIA stores and distributes medical materiel from eight depots. KIMADIA rations medicines to pharmacies and medical facilities.
- (U) Despite government claims that its medical materiel meets international standards, the quality of most Iraqiproduced products is inferior. In October 1998, Baghdad announced that it had introduced more than 250 new pharmaceuticals to meet its requirements. However, these pharmaceuticals are merely repackaged, imported finished products. Consequently, Iraq remains heavily dependent on imported pharmaceuticals.
- (U) The Arab Company for Antibiotics Industry pharmaceutical plant in Al Madain was built to increase pharmaceutical production (Figure 2). Although construction began in August 1990, the facility did not open until December 1997. The 27,000-square meter complex includes three production halls, a shipping and bulk storage area, electrical generator, and quality control laboratory. Pharmaceutical production is limited to tablets and syrups. Continued operation of this facility depends on imported raw materials and spare parts.
- (U) Extreme shortages of medical materiel have led to the reuse of disposable products and black marketing. Disposable items, including gloves, syringes, and hypodermic needles, are sterilized after use and reused. This practice likely will increase the spread of infections. Black marketing will increasingly limit the availability of some medical items, despite government efforts to enforce the use of rationing cards for distributing medicines.
- DEFEC (S) Some pharmaceutical and research facilities are suspected of assisting the military to develop weapons for Iraq's chemical and biological warfare programs when these programs are operational. Although these pro-

grams are not currently active, selected facilities probably will provide technology and equipment for chemical and biological warfare programs in the future. CPT

Blood Supply

(U) Blood banks supply adequate quantities of blood for peacetime needs; however, the blood supply is not safe. Some blood is tested for hepatitis and HIV. All blood donated by civilians is available for use by military medical facilities.

(b)(1),1.4(c)

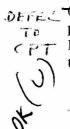
Support to Military Services

(b)(1),1.4(c)

(U) Most of the 250 nonmilitary hospitals and all five medical college hospitals are designated wartime contingency mobilization hospitals. Upon activation, civilian hospital personnel would staff these facilities.

Military Health Care

(b)(1),1.4 (c)



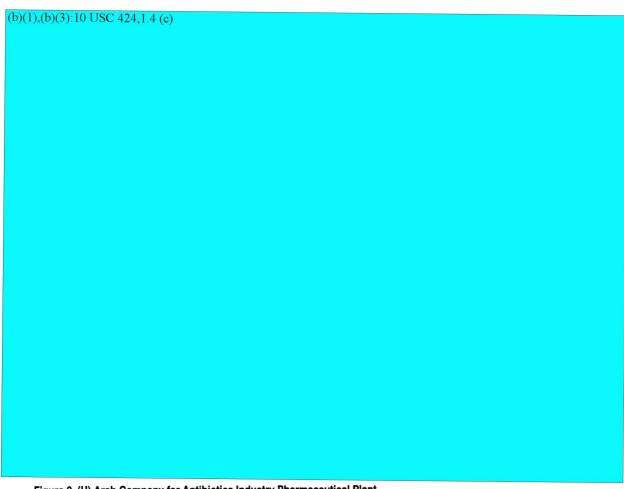


Figure 2. (U) Arab Company for Antibiotics Industry Pharmaceutical Plant.

Medical Indicators			
Population (millions)	Iraq 21.8	United States 267	
Hospital Beds	18/10,000 population	37/10,000 population	
Physicians	4/10,000 population	26/10,000 population	
Infant Mortality Rate	127 deaths/1,000 live births	9 deaths/1,000 live births	
Life Expectancy at Birth	59 years	76 years	
		UNCLASSIFIED	

(b)(1),1.4(c)

Europe. However, most better-trained military physicians have departed Iraq. The medical care capabilities of the remaining, marginally trained physicians are further limited by acute shortages of essential medical equipment and pharmaceuticals. Consequently, the medical skills of most Iraqi military physicians have dropped well below Western standards.

(b)(1),1.4(c)

(b)(1),(b)(3):10 USC 424,1.4 (c)

Figure 4. (U) Rashidiyah Military Hospital.

BI	ood	Su	pr	ylc

Casualty Handling

(b)(1),1.4(c)

(b)(1),1.4 (c)

(U) Forward area combat casualties receive buddy- or self-aid initially, and then are treated and stabilized by company-level aidmen when the tactical situation allows. However, aidmen are not properly trained to arrest hemorrhage, splint fractures, treat for shock, or administer morphine and other injectable medications.

(b)(1),1.4(c)

(U) The military medical services do not use oxygencarrying blood substitutes. In Iraq, the term "blood substitute" generally refers to crystalloid solutions and plasma expanders.

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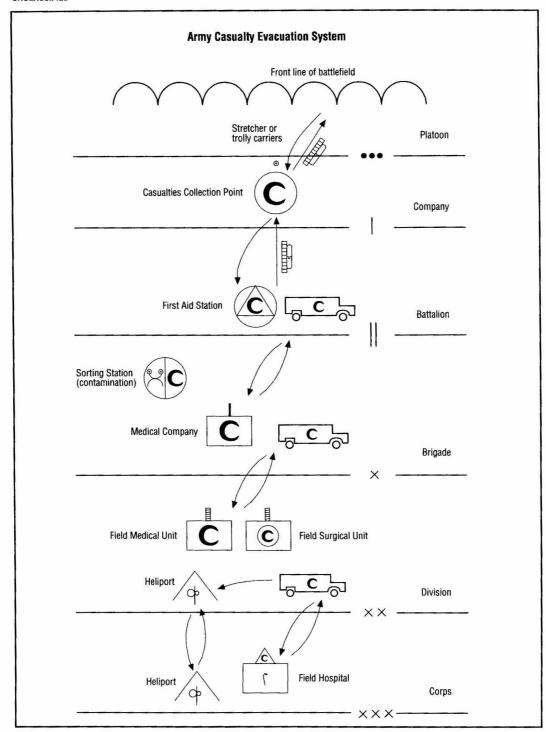


Figure 6. (U) Army Casualty Evacuation System.

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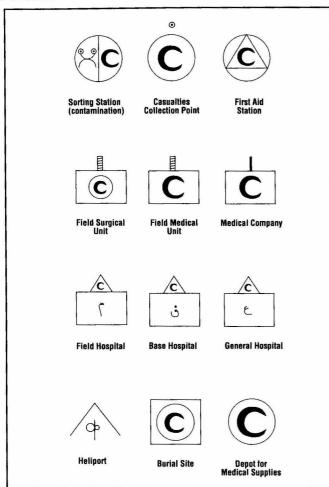


Figure 7. (U) Military Medical Graphics.

Table 1 (U) Medical Evacuation Assets

Ve	hicle	Capacity
M [*]	r-lb apc	Four stretcher or eight ambulatory patients
YV	V-750 APC	Four stretcher or eight ambulatory patients
Me	ercedes truck	Four stretcher or eight ambulatory patients
Ma	agirus truck	Four stretcher or eight ambulatory patients
Nis	ssan bus ambulance	Eight stretcher or 20 ambulatory patients

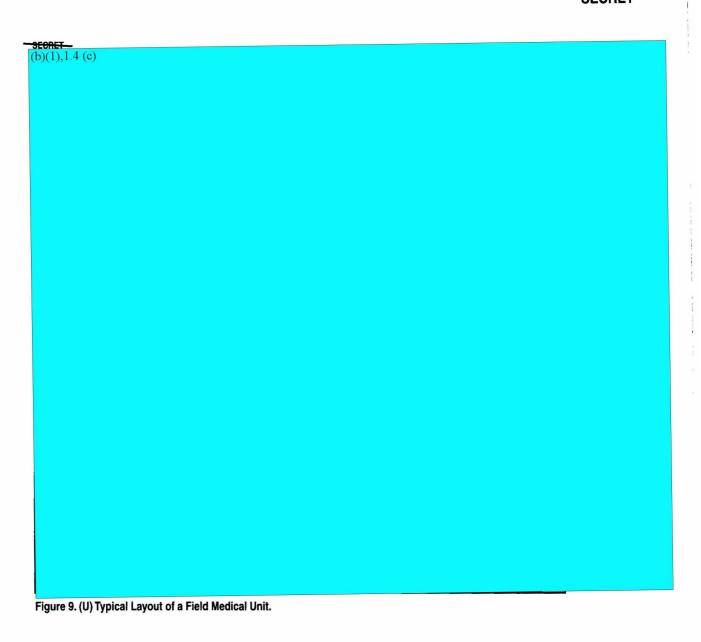
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Figure 8. (U) Chinese-built YW-750 Armored Personnel Carrier.

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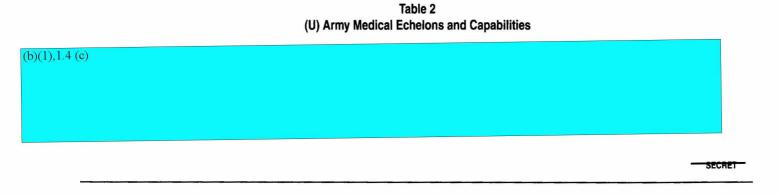
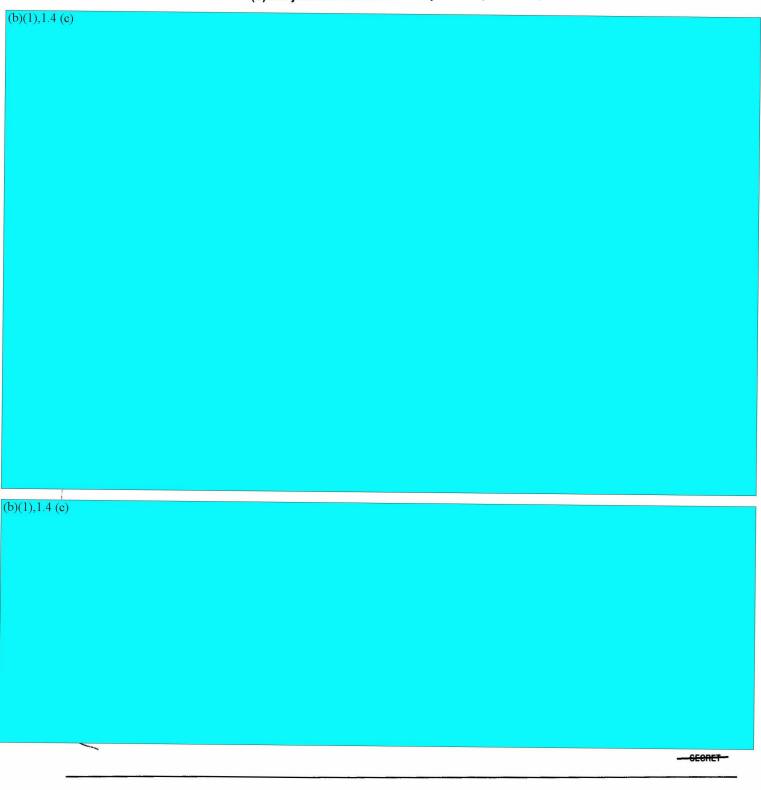


Table 2 (U) Army Medical Echelons and Capabilities (Continued)



Chemical Medical Issues

(b)(1),1.4(c)

(U) When military personnel sustain chemical casualties, Army Medical Corps doctrine calls for evacuation of exposed personnel to the FMU chemical platoon for decontamination. The decontamination process occurs near the FMU and consists of removing contaminated clothing, showering, skin blotting, and issuing new clothing. Once casualties clear the decontamination phase, they are transported to the FMU for medical treatment.

Disaster and Emergency Response Capabilities

(U) Limited amounts of medical materiel and the generally poor quality of the medical infrastructure limit Iraq's capability to cope effectively with a major disaster. The country has very few transportation assets to reach disaster sites outside major urban areas. Host nation capabilities for disaster response would be hindered by an inability to access disaster areas.

(b)(1),1.4 (c)

- (U) The Ministry of the Interior is responsible for administering all civil defense activities, but lacks the resources to properly perform its duties. Since the department has little organizational capabilities, the Iraqi military will play a major role in any disaster. Moreover, adequate provisions, such as tents, food, and medical assistance, are not available. Iraq would require assistance from United Nations agencies, the International Committee for the Red Cross, and foreign governments.
- (U) The central ambulance service (telephone 122) has extremely limited assets and is restricted to a few large cities. Ambulance services, although crude and unreliable, are available in Baghdad. Most city hospitals use small vans or conscripted private vehicles for patient transport. No ambulance services are available outside major cities.

Social Factors

- (U) The Iraqi government claims that there is no tribal, ethnic, or political discrimination in access to medical care. Although overt discrimination is not apparent, access to quality medical care is economically and politically restrictive.
- (U) Some inhabitants, primarily in rural areas of northern Iraq, maintain traditional, nonscientific beliefs concerning the causes and cures of illnesses. Despite traditional medical practices, no religious beliefs infringe on modern medical care.

Medical Assistance Requirements

- (U) The Iraqi health care system would benefit most from assistance focused in four areas. First, basic preventive medicine programs, such as immunization programs, and veterinary care for livestock are needed.
- (U) Secondly, Iraq needs medical logistics support, including medical supplies and pharmaceuticals, equipment maintenance programs, and transportation assets.

- (U) Next, the health care system needs training materials for health care professionals and paraprofessionals. Training would increase the number of adequately trained personnel and the overall quality of medical personnel.
- (U) Finally, additional village health clinics and renovation of existing medical facilities are greatly needed. All government hospitals and clinics require extensive repairs to the plumbing, climate control, and electrical systems.

Humanitarian Assistance

- (U) Since March 1991, many NGOs and foreign governments have provided humanitarian assistance to Iraq. The presence of NGOs varies because of regional hostilities and fluctuating funding. More than 1.25 million of northern Iraq's 3.7 million population depends on some form of humanitarian assistance. Most aid consists of food and consumer products; medical products represent less than one-third of all material sent to Iraq.
- (U) Medical products serve as excellent barter material. Iraqi and Kurdish officials steal and divert many NGO medical shipments. Iraqi officials, military leaders, and government employees reportedly sell donated medical supplies for personal gain. In May 1998, Baghdad publicly executed two men who were suspected of stealing medical supplies. Even so, widespread sales of medical supplies will continue.
- (U) Since the end of Operation DESERT STORM, Saddam Husayn has taken unusual measures to limit the availability of medicine to Kurds, especially in the northern Kurdish autonomous zone. Baghdad has sponsored a terrorist campaign against the daily relief convoys arriving from Turkey. Terrorists have attacked and looted many convoys, and killed scores of people, including several humanitarian workers. The attacks have delayed the delivery of essential medical supplies to the region and resulted in many deaths. Iranian and Turkish military attacks in northern Iraq further hinder humanitarian efforts.

- (U) The Shia-dominated population of southeastern Iraq also has experienced severe medical shortages. The government continues to embark on a campaign to rid this region of Shia insurgents. Despite token Baghdad-sponsored immunization campaigns, military units—especially Iraqi Republican Guard units—around Baghdad receive most of the region's limited medical resources. Although Husayn has promised millions of dollars for renovating the southeastern regional medical infrastructure, future health care resources will remain dedicated to military personnel.
- (U) Health care in the northern provinces of Arbil, Dahuk, and As Sulaymaniyah is better than that in other areas outside Baghdad. United Nations and NGO assistance has provided some stability and partly restored the medical infrastructure. Although NGOs have largely concentrated on rehabilitation programs, programs such as mobile clinics, mines awareness, and utilities restoration have public health implications.

Outlook

(U) Iraqi civilian and military health care systems will improve only if Saddam Husayn allows it. Following the implementation of United Nations sanctions at end of Operation DESERT STORM, Husayn has intentionally restricted the quality of health care available to selected Iraqi populations. Understaffed and poorly equipped public hospitals will continue to deteriorate while the number of health care-related deaths will continue to rise moderately. Conversely, military unitsespecially Iraqi Republican Guard units-will receive sufficient, albeit marginal, medical care. Husayn will continue to use the death and unnecessary suffering of Iraqis in an attempt to have the sanctions lifted. The quality of health care would rapidly improve if Husayn were to lift his self-imposed restrictions and equally distribute available medicines. As it stands, an estimated \$2 billion and 2 years are necessary to fully rehabilitate existing Iraqi hospitals to pre-1991 condition.

Key Medical Treatment Facilities

Baghdad

-(C) Facility:

Ibn Al Bitar (PARC) Hospital

Address: Adiace

Adjacent to Baghdad's central radio/television broadcasting station

(b)(1),(b)(3):10 USC 424,1.4 (c)

Type:

Private

Beds:

200

Services:

General medical, surgical, cardiology, ear, nose, and throat (ENT), plastic surgery, urology. Well-equipped emergency room,

intensive care unit (ICU), and six operating rooms. Renal lithotripsy.

Comments:

Until 1991, 550 expatriates were on staff; quality declined significantly with their departure. Second best surgical

care facility in Iraq. Referral facility for Iraqi notables and foreign diplomats. Emergency generator.

(U) NOTE: The information on the above facility becomes unclassified when the BE number is removed.

(C) Facility:

Ibn Sina Hospital

Address:

Right side of Haifa Street, approximately 500 meters before palace gates

(b)(1),(b)(3):10 USC 424,1.4 (c)

Type:

Private

Beds:

100

Services:

General medical, general surgery, cardiac and plastic surgery, cardiology, ENT, and renal lithotripsy. Well-equipped emergency

room, ICU, and operating room. Magnetic resonance imaging (MRI).

Comments:

Best private surgical care facility in Iraq, but its use is limited to Saddam Husayn's family and high-ranking military and politica

officials. Saddam's son, Udayy, was treated at this facility following a December 1996 assassination attempt. Emergency generator.

(U) NOTE: The information on the above facility becomes unclassified when the BE number is removed.

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Key Medical Treatment Facilities (Continued)

(C) Facility:

Saddam Husayn Medical City Complex (formerly Baghdad Medical City Complex)

Address:

Ar Razi and Al Asharit Streets (North Gate)

(b)(1),(b)(3):10 USC 424,1.4 (c)

Type:

Civilian

Beds:

1,270

Services:

General medical, surgical, and pediatrics (all major services). Two CT scanners.

Comments:

Opened in 1980. Approximately 1,000 employees. Includes 650-bed surgical hospital, 220-bed pediatric hospital, Baghdad Medical College, and 11-story, 400-bed subspecialty hospital with 6 operating rooms. Nine-story nurses' residence, nine-story physicians' residence, six- to eight-story nursing home, and three-story conference center also on compound. Some buildings sustained blast damage during Operating Desember 1998. Underground parking garage located approximately 220 meters south

of main hospital building. Probably will be used to treat military casualties. Several emergency generators.

(U) NOTE: The information on the above facility becomes unclassified when the BE number is removed.

Basra

-(C) Facility: Al Basra Port Administration Hospital (b)(1),(b)(3):10 USC 424,1.4 (c)

Type:

Government

Beds:

800

Services:

General medical, surgical, cardiology, EENT, obstetrics/gynecology (OB/GYN), ophthalmology, otolaryngology, dermatology, and

radiology. Operating room and ICU.

(U) NOTE: The information on the above facility becomes unclassified when the BE number is removed.

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