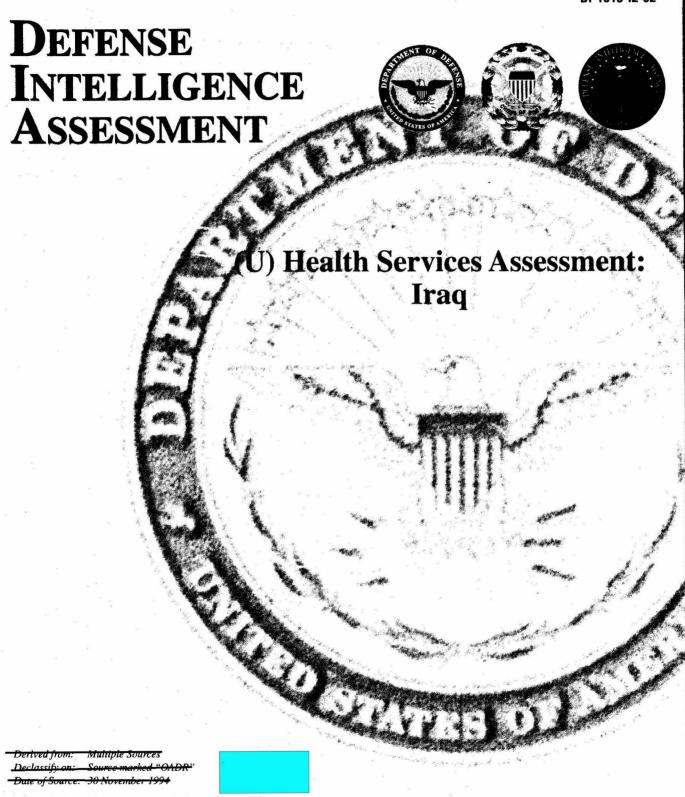
March 2002 DI-1813-IZ-02



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## **Defense Intelligence Assessment**

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.

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This product responds to USCENTCOM's production requirement I005-00-0125.

## (U) Health Services Assessment: Iraq

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(b)(1),1.4(c)

(U) Mass casualties would quickly overwhelm the entire health care system.

(b)(1),1.4(c)

(U) Iraq's infant mortality rate is 13 times higher than that in the United States.

(b)(1),1.4(c)

(U) Military medical facilities generally are inadequate. Despite many large military hospitals in Baghdad, the quality of care is much lower than that provided in Western countries. However, it is better than the care provided by Iraqi government hospitals.

(b)(1),1.4(c)

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DI-1813-IZ-02

## **Key Judgments (Continued)**

(b)(1),1.4(c)

(U) Humanitarian assistance and medical supplies obtained under the United Nations' resolutions will continue to benefit the Iraqi military while providing minimal medical assistance to the Kurds and Shia.

#### **Contents** Civilian Health Care ..... 1 Organizational Effectiveness..... 2 3 3 Blood Supply..... Military Health Care ..... 4 Organizational Effectiveness..... 5 Quality of Medical Personnel ..... 5 6 6 Blood Supply..... 7 12 Chemical Medical Issues..... 12 Disaster and Emergency Response Capabilities ..... 13 Social Factors.... 13 **Appendix** 15 **Tables** 4 9 11 **Figures** ۷ 1 2 3 4. Arab Company for Antibiotics Industries Pharmaceutical Plant ..... 5. Organization of the Armed Forces Directorate of Medical Services and 5 7 6. INTERMED Armored Mobile Hospital .....

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## **Contents (Continued)**

7. Army Casualty Evacuation System
8. Military Medical Symbols
9. Chinese-built YW-750 Armored Personnel Carrier
10. Typical Layout of a Field Medical Unit
11. Saddam Husayn Cardiac Center
12. Ibn Sina Hospital
13. Rashid Military Hospital
14. Saddam Husayn Medical City Complex
15. Al Basra Maternity Hospital
16. Martyr Hamad Shahab Military Hospital

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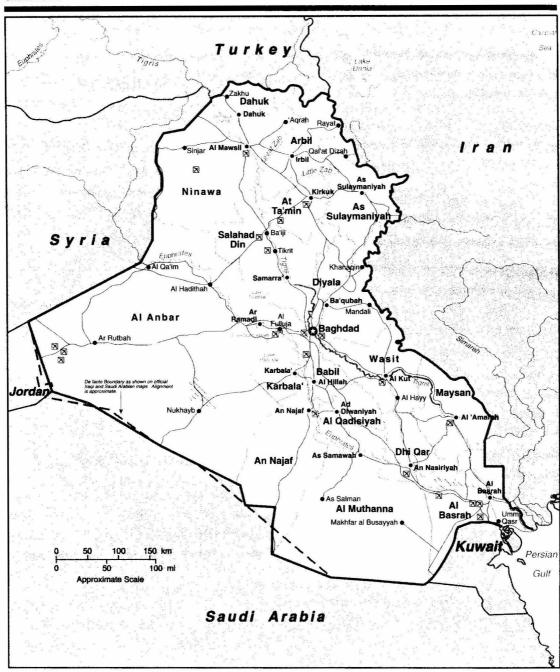


Figure 1. (U) Map of Iraq.

## (U) Health Services Assessment: Iraq

#### Civilian Health Care

(U) Following two major wars, one against Iran in the 1980s and the other against multinational Coalition forces during the 1991 Gulf War, Iraq's health care system can barely provide basic health care services (figure 2). Armed struggles continue in the southeastern and northern regions of the country. These conflicts and United Nations' sanctions have severely crippled the Iraqi medical infrastructure, especially the civilian sector.

(U) In January 1996, Iraq finally accepted United Nations Security Council Resolution 986, which allows the sale of Iraqi oil to purchase medical materiel; the resolution was passed in April 1994. Saddam

Husayn's delay in implementing this resolution worsened military and civilian medical supply shortages. Future capabilities of the Iraqi health care system will depend on foreign medical aid and the United Nations Security Council resolutions. Meanwhile, Iraqis — primarily Kurds and Shia — will continue to die because of a lack of basic health care, malnutrition, and the absence of preventive medicine and public health programs.

#### **Organizational Effectiveness**

(U) The health care system, while well organized, is ineffective because of a severe lack of medical resources. Most medical care is restricted to major urban areas, and high quality tertiary care is economically restricted to wealthy Iraqis.

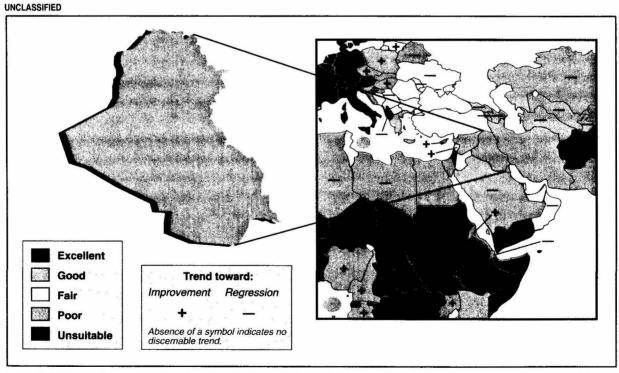


Figure 2. (U) International Health Care Standing. Health care is a low national priority. Medical care is not available to large sectors of the population. Tertiary care is minimally available, and primary and secondary health care is rudimentary. The regime controls pharmaceutical availability. Understaffed, poorly equipped public hospitals will continue to deteriorate, while the number of deaths related to lack of health care will rise moderately.

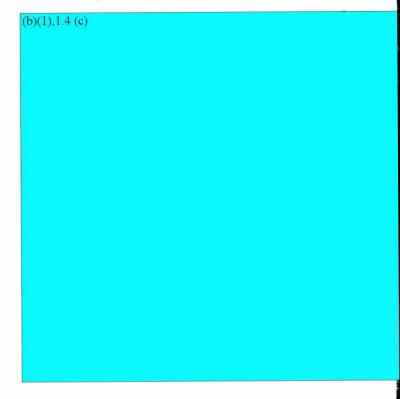
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- (U) The Ministry of Health (Saadoun Street, Baghdad; telephone 776-1970) operates a tiered health care system, linked by a referral and supervision arrangement (figure 3). The Ministry of Health maintains liaisons with the Defense, Agriculture, Interior, Labor, and Social Affairs Ministries, Iraqi Red Crescent Society, and Scientific Planning Board. The entire Iraqi medical system depends heavily on procuring medical supplies through the United Nations Security Council resolutions and humanitarian donations from governments and nongovernmental organizations.
- (U) Nearly two-thirds of all physicians and almost all nurses work in Baghdad, which contains only 27 percent of the country's population. In addition, the capital contains more than 50 percent of Iraq's complement of hospital beds.

#### **Quality of Medical Personnel**

(U) Two factors greatly reduce the quality of Iraqi medical personnel. First, medical training is heavily oriented toward didactic instruction, with little handson or clinical practicum training. The departure of experienced Iraqi medical school instructors and a severe shortage of medical educational materials

greatly reduce instruction quality. Second, a serious shortage of functioning automated diagnostic equipment limits the ability of physicians to make rapid, accurate diagnoses.



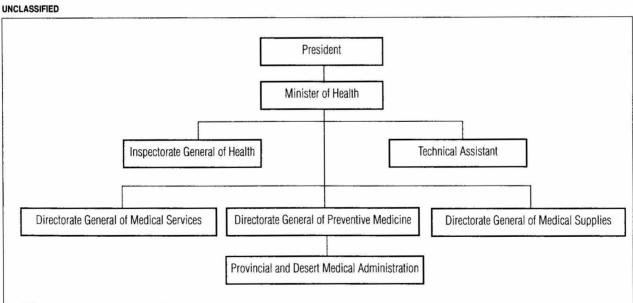


Figure 3. (U) Organization of the Ministry of Health.

(U) Iraq has been sending medical personnel teams on a rotating basis to hospitals in Jordan to assist in treating Palestinian intifadah casualties. The medical teams include general surgeons, neurologists, anesthesiologists, and nursing and support staff. Although critical shortages of trained medical specialists exist, Saddam Husayn has been diligently keeping a high profile in the Middle East by supporting the Palestinians' cause.

#### **Quality of Medical Treatment Facilities**

- (U) Government and private medical facilities generally are in poor condition. Most medical facilities are more than 20 years old and have been neglected since the 1991 Gulf War. The majority of facilities are operating below 70 percent capacity because of severe medical materiel and personnel shortages. Moreover, few hospitals have reliable, functioning diagnostic equipment and emergency generators. Private hospitals offer the best medical care and are better equipped than their government counterparts. Saddam Husayn has ordered government hospitals to become self sufficient by charging for services.
- (U) All Iraqi hospitals function well below minimum acceptable US sanitary standards. The national budget does not provide sufficient funding to repair and renovate medical facilities. An estimated \$2 billion and 2 years are necessary to restore and fully rehabilitate existing Iraqi hospitals to pre-1991 condition.

shortfall and resulting shortages are worsened because of the long period between ordering and receiving medical items.

- (U) Iraq has a very centralized medical materiel procurement and distribution system. The State Company for Drugs and Medical Appliances, known as KIMA-DIA, procures all medical equipment and pharmaceuticals. KIMADIA, a government agency subordinate to the Ministry of Industry and Minerals, also stores and distributes medical materiel from eight depots. KIMADIA rations medicines to pharmacies and medical facilities.
- (U) Despite government claims that domestic medical materiel meets international standards, the quality of most materiel is inferior and generally not favored by Iraqis. Consequently, Iraq will continue to depend heavily on imported pharmaceuticals.
- (U) The Arab Company for Antibiotics Industries; figure 4) pharmaceutical plant in Al Madain, which opened in December 1997, was built to increase production to meet Iraqi pharmaceutical needs. Production is limited to producing and packaging tablets, syrups, and liquids for injectable products. Continued facility operation relies on imported raw material and spare parts.

(b)(1),1.4(c)

#### **Medical Materiel**

(U) Iraq is unable to produce or obtain an adequate supply of medical materiel. The current provisions of United Nations Security Council Resolution 986 allocate about one-half the funds that Iraq spent on medical materiel prior to the Gulf War. The funding (b)(1),1.4 (c)

Figure 4. (U) Arab Company for Antibiotics Industries Pharmaceutical Plant.

b)(1),1.4(c)

(b)(1),1.4(c)

(U) Most of Iraq's 250 nonmilitary hospitals and all five of its medical college hospitals are designated as wartime contingency mobilization hospitals.

## **Military Health Care**

(b)(1),1.4(c)

#### **Blood Supply**

(U) The blood supply does not meet Western standards and is not safe. Iraq has sufficient blood-banking capabilities to supply adequate quantities of blood for the country's needs. Most blood is tested for hepatitis and HIV, although these tests are unreliable. All donated blood is available to military medical facilities.

### **Support to Military Services**

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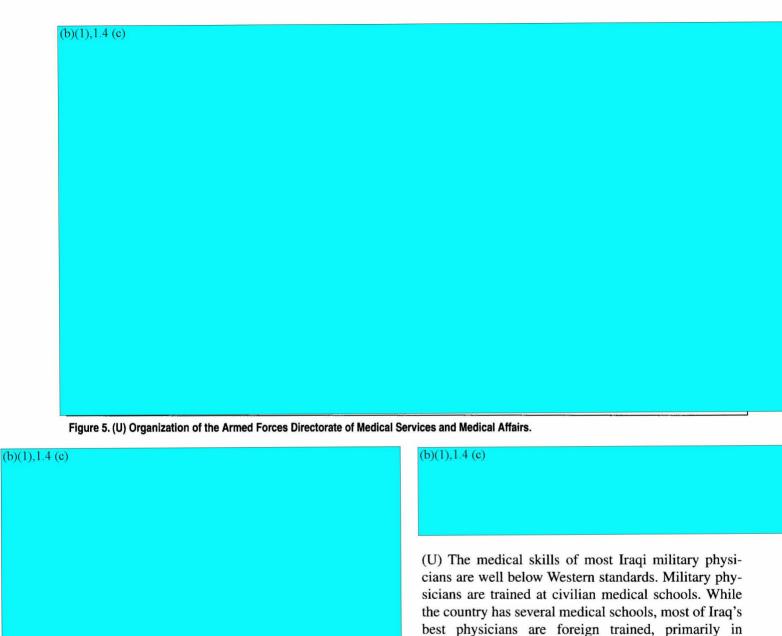
**Organizational Effectiveness** 

(b)(1),1.4(c)

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#### Table 1 Medical Indicators

	Iraq	United States
Population (millions)	23.6	284
Hospital Beds	14/10,000 population	37/10,000 population
Physicians	4/10,000 population	27/10,000 population
Infant Mortality Rate	92 deaths/1,000 live births	7 deaths/1,000 live births
Life Expectancy at Birth	59 years	77 years



Europe. However, many better-trained military physicians have departed Iraq, and few well-trained physicians remain.

**Quality of Medical Treatment Facilities** 

(b)(1),1.4 (c)

	(b)(1),1.4 (c)	Figure 6. (U) INTERMED Armored Mobile Hospital. Inset shows one hospital component.
(b)(1),1.	4 (c)	Casualty Handling (b)(1),1.4 (c)
	(U) The military medical services do not use oxygen-carrying blood substitutes. In Iraq, the term "blood substitute" generally refers to crystalloid solutions and plasma expanders.	(U) Forward area combat casualties receive buddy- or self-aid initially, and then are treated and stabi- lized by company-level aidmen when the tactical sit- uation allows. However, aidmen are not properly trained to arrest hemorrhage, splint fractures, treat shock, or administer morphine and other injectable medications.

## UNCLASSIFIED **Army Casualty Evacuation System** Front line of battlefield Stretcher or trolly carriers Platoon **Casualties Collection Point** Company First Aid Station Battalion Sorting Station (contamination) Medical Company Brigade Field Medical Unit Field Surgical Unit Heliport Division Field Hospital Heliport Corps

Figure 7. (U) Army Casualty Evacuation System.

## (b)(1),1.4 (c)

#### UNCLASSIFIED







Sorting Station (contamination)

Casualties Collection Point

First Aid Station







Field Surgical Unit

Field Medical Unit

**Medical Company** 







Field Hospital

Base Hospital

**General Hospital** 







Heliport

**Burial Site** 

Depot for Medical Supplies

Figure 8. (U) Military Medical Symbols.

#### (b)(1),1.4(c)

#### UNCLASSIFIED

## Table 2 Medical Evacuation Assets

Vehicle Capacity MT-LB APC Four stretcher or eight ambulatory patients YW-750 APC Four stretcher or eight ambulatory patients Four stretcher or eight Mercedes truck ambulatory patients Magirus truck Four stretcher or eight ambulatory patients Nissan bus ambulance Eight stretcher or 20 ambulatory

patients

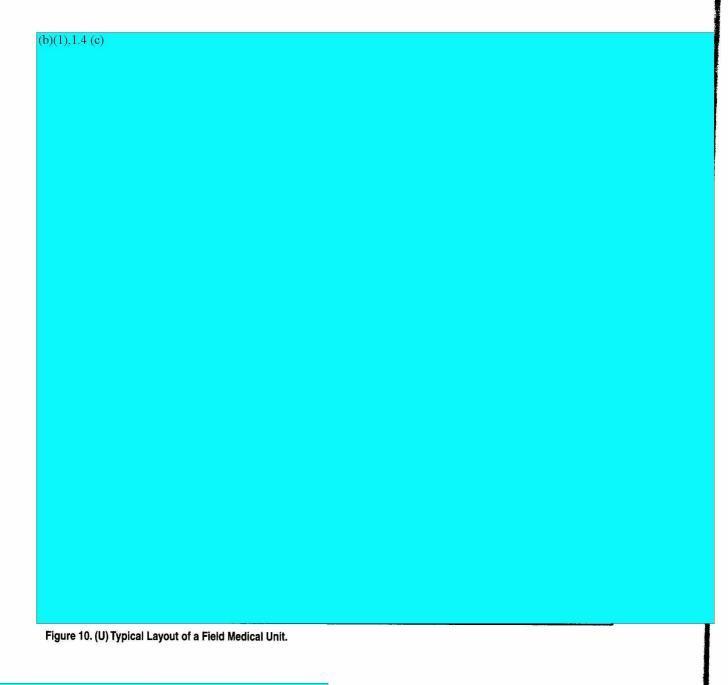
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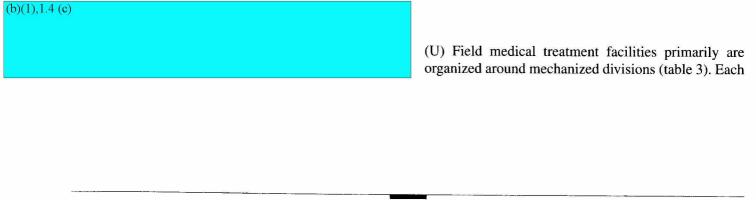


Figure 9. (U) Chinese-built YW-750 Armored Personnel Carrier.

(b)(1),1.4(c)

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regular army division normally has three FMUs assigned, and each Republican Guard regiment has its own FMU. Medical services range from major surgery and some specialty and convalescent care at division hospitals to platoon-level medical aidmen who primarily evacuate casualties to the rear.

**Chemical Medical Issues** 

(b)(1),1.4(c)

(b)(1),1.4(c)

(U) IAMC doctrine calls for evacuation of chemical casualties 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) Host-nation capabilities for responding to a major natural disaster are hindered by Iraq's inability to access the disaster area. Transportation assets outside major urban areas are very limited. Insufficient medical materiel and the generally poor quality medical infrastructure further limit Iraqi abilities to cope effectively with a major disaster.
- (U) The Ministry of the Interior is responsible for the administration of all civil defense activities. Within the ministry, the Director General of the Public Civil Defense Directorate coordinates the country's disaster relief operations.
- (U) The Ministry of Interior lacks the resources to properly perform its duties. Since the department has limited organizational capabilities, the military would play a major role in disasters. Moreover, adequate provisions, such as tents, food, and medical assistance, are not available. Iraq would require foreign assistance during a disaster.
- (U) The central ambulance service (telephone 122) is severely limited in assets and training, and is restricted to a few large cities. Ambulance services, albeit 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.

(b)(1),1.4(c)

(b)(1),1.4(c)

#### **Social Factors**

- (U) The Iraqi government claims that there is no tribal, ethnic, or political discrimination in access to medical care. However, access to quality medical care is economically and politically restrictive.
- (U) Some people, 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.

#### **Outlook**

(U) Following the implementation of United Nations' sanctions after the Gulf War, Saddam 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 deaths related to a lack of health care will rise moderately. An estimated \$2 billion and 2 years are necessary to restore and fully rehabilitate existing Iraqi hospitals to pre-1991 condition. Conversely, military units, especially Republican Guard units, will continue to receive sufficient, albeit marginal, medical care. Saddam will continue to use the deaths and unnecessary sufferings of Iraqis in an attempt to have the United Nations' sanctions lifted. The quality of health care would improve rapidly if Saddam Husayn were to lift his self-imposed restrictions and equably distribute available medicines.

# Appendix A Key Medical Treatment Facilities

#### SECRET.

Facility

Saddam Husayn Cardiac Center

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

Location:

Adjacent to Baghdad's central radio/television broadcasting station

City:

Baghdad

Type: Beds: Private 200

Capabilities:

 ${\sf Medical--general, cardiology; surgery--general, plastic, ear/nose/throat (ENT), urology, renalling {\sf Net} {\sf Constant} {\sf Constan$ 

lithotripsy; ancillary — well-equipped emergency room, intensive care unit (ICU), 6 operating rooms.

Comments:

Second best surgical care facility in Iraq. Referral facility for Iraqi notables and foreign diplomats.

Emergency generator.

NOTE: The information on the above facility becomes UNCLASSIFIED when the BE number is removed.

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

Figure 11. (U) Saddam Husayn Cardiac Center.

# Facility | Ibn Sina Hospital | (b)(1),(b)(3):10 USC 424,1.4 (c)

Location:

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

City:

Baghdad Private

Type: Beds:

100

Capabilities:

Medical — general, cardiology; surgical — general, cardiac, plastic, ENT, renal lithotripsy; ancillary —

well-equipped emergency room, ICU, 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 political officials. Emergency generator.

NOTE: The information on the above facility becomes UNCLASSIFIED when the BE number is removed.



Figure 12. (U) Ibn Sina Hospital.

#### SECRET

Facility: Rashid Military Hospital

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

Location:

Mu'askar ar Rashid (Rashid Military Camp)

City:

Baghdad Military

Type: Beds:

800

Capabilities:

Medical — general, internal medicine, cardiology, ENT, psychiatry, dentistry; surgery — general,

neurosurgery, plastic, urology, cardiovascular, orthopedics, ophthalmology, maxillofacial; ancillary — ICU, operating rooms, burn care area, radioisotope, dialysis, ultrasound, computerized tomography (CT)

scanner, arteriography.

Comments:

Primary military medical facility. Originally built in 1939; currently undergoing extensive demolition and possible reconstruction. Consequently, some services have been transferred to facilities, most likely the Saddam Husayn Medical Ciltiy Comples and the Martyr Hamad Shahab Military Hospital. Equipped with some of the best medical equipment available. Treated mustard casualties during the Iran-Iraq War.

Nursing and support services are poor. Emergency generator.

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

Figure 13. (U) Rashid Military Hospital.

#### CECRET

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

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

Location:

Ar Razi and Al Asharit Streets (North Gate)

City:

Baghdad

Telephone:

4168611, 4169004

Type:

Civilian

Beds:

1,270

Capabilities:

Medical — general, pediatrics; surgery — general; ancillary — 2 CT scanners.

Comments:

All major services. Approximately 1,000 employees. Opened in 1980. Compound 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. Some buildings sustained blast damage during Operation DESERT FOX in 1998. Underground parking garage approximately 220 meters south of main hospital building. Probably used to treat military casualties. Several emergency generators.

NOTE: The information on the above facility becomes UNCLASSIFIED when the BE number is removed.

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

Figure 14. (U) Saddam Husayn Medical City Complex.

#### SECRET

Facility Al Basrah Maternity
(b)(1),(b)(3):10 USC 424,1.4 (c) Al Basrah Maternity Hospital (Port Administration Hospital)

City:

Basrah

Type:

Government

Beds:

800

Capabilities:

Medical — general, cardiology, dermatology, ophthalmology, eye/ear/nose/throat (EENT),

otolaryngology; surgery — obstetrics/gynecology; ancillary — ICU, operating room, radiology.

NOTE: The information on the above facility becomes UNCLASSIFIED when the BE number is removed.



Figure 15. (U) Al Basrah Maternity Hospital.

#### SECRET

Facility: Martyr Hamad Shahab Military Hospital (formerly known as Rashidiyah Military Hospital) (b)(1),(b)(3):10 USC 424,1.4 (c)

Location:

Taji Military Logistic Support Area; 30 kilometers north of downtown Baghdad (8 kilometers from city

limits) on highway to Kirkuk

City:

Baghdad

Type: Beds: Military 400

Capabilities:

Medical — general, ENT, obstetrics/gynecology; surgical- — general, cardiac, neurosurgery, plastic,

orthopedics, vascular; ancillary — ICU, burn care area.

Comments:

Main hospital in the Taji Military Logistic Support Area. Three-story hospital, with a residential building, mosque, and equipment storage building. Twelve wings. An estimated 25 percent of peacetime surgical patients are civilians. Underground emergency generator. Nuclear-hardened bunker with 10-bed

capacity. Emergency generator. Small three-four patient prison ward.

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

Figure 16. (U) Martyr Hamad Shahab Military Hospital (formerly known as Rashidiyah Military Hospital).

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