

The following table accounts for the personnel arrangement of the hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
2	14	36	-	6	23	8

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
7	145	12	12	24	66

The following table lists main items of medical equipment used in this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
X-ray apparatus	2	-	-	Operative
Anesthesia machine	12	UK, Japan	-	10units operative
Electro surgical unit	2	USA	-	Operative
Shadowlss lamp	9	France, Japan	-	8units operative
ECG monitor	1	Japan	-	Operative
ECG	2	Japan	-	Operative
Sterilizer	7	France, USA, Germany	-	Operative
Ventilator	15	-	-	10units operative
Operation table	4	-	-	Operative

Major equipment	Q'ty	Country	Procured year	Comment
ECG	1	Japan	-	Operative
Defibrillator	2	Japan	-	Operative
ECG monitor	1	Japan	-	Operative
Ventilator	3	Germany, UK	-	Operative

#### b. Emergency Department

Al Razi Hospital is in charge of the emergency care services for the City of Aleppo. The emergency department of this hospital has been recently renovated and in good condition. It has a reception room, consulting rooms, treatment rooms, examination rooms, X-ray rooms, emergency operation theaters, and a four-bed ICU room. As the ICU's there are not arranged to receive medical gases through a centrally controlled manifold, oxygen gas cylinders are directly placed inside the ICU room. This hospital receives electrical power supply through two different circuits in order to reduce

chances of experiencing total power failure. In addition, the hospital is equipped with an emergency power generator capable of generating 100 kVA, which is operated to light operating rooms, etc., during power failures.

The following table lists main items of medical equipment installed in the emergency department. This department doesn't have much equipment since the renovation has been carried out only on the building facilities.

Major equipment	Q'ty	Country	Procured year	Comment
X-ray apparatus	2	Japan	-	Operative
Defibrillator	1	Japan	-	Operative
Shadowless lamp	4	Japan	-	Operative
Ventilator	1	Germany	-	Operative

The following table shows the annual numbers of emergency patients treated at Al Razi Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
23,351	3,897	20,895	5,793	22,049	7,809	38,659	4,816	48,279	3,682

## 2) Ibn Roushd Hospital

### a. Profile

Specialties : general hospital (mainly: internal medicine)

Number of Beds :144 beds

Since this hospital mostly specializes in internal medicine, it does not have any operating rooms. Instead, the hospital is well equipped with such laboratory equipment as an automatic chemical analyzer and an automatic electrolyte analyzer.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
8	-	16	21	-	44	6

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
21	64	10	49	7	46

The ICU's of the emergency department of this hospital are separated into two sections, one for male patients and the other for female. Each section is provided with three beds. Main items of medical equipment installed in the male section of the ICU's are bedside monitors, defibrillators, respirators, suction apparatus, and sphygmomanometers. For the female section, main items installed are bedside monitors, defibrillators, suction apparatus, and sphygmomanometers. In addition to the ICU's of the emergency department, this hospital has ICU's in another department, which are also separated into two sections, by gender. Bedside monitors, a central monitor, and defibrillators are equipped in the ICU. This hospital is also bothered by frequent power failures as hospitals of other muhafazats. In order to provide power to infant incubators as well as to lighting installation during the power failures, the hospital is equipped with a power generator capable of generating 35 kVA.

The following table lists main items of medical equipment used in the ICU rooms of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
ECG	1	Germany	1989	Operative
Defibrillator	1	UK	1989	Operative
ECG monitor	8	UK	1989	Operative
Ventilator	3	Germany, UK	1989	Operative
Central ECG monitor	2	UK	1989	Operative

## b. Emergency Department

The emergency department of Ibn Roushd Hospital specializes in internal medicine. This department received renovation work, which completed in May, 1992. After this renovation work, the emergency department started receiving patients again.

Since this hospital does not have any ambulance, there is a following arrangement for ambulance mobilization. When an ambulance is needed, this hospital asks Al Razi Hospital to dispatch one of the ambulances stationed there. If Al Razi Hospital cannot meet the request, then the request for an ambulance is conveyed to the garage of the Health Directorate of Aleppo, which will eventually satisfy the demand by sending one of its ambulances.

The following table lists main items of medical equipment installed in this emergency department.

Major equipment	Q'ty	Country	Procured year	Comment
ECG	1	Germany	1990	Operative
Defibrillator	2	Japan	1992	Operative
ECG monitor	6	UK	1992	Operative
Ventilator	7	Germany, UK	1992	Operative
Hot air sterilizer	2	UK	1989	Operative

The following table shows the annual numbers of emergency patients treated at Ibn Roushd Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
14,718	2,760	22,773	3,024	38,955	3,306	43,687	5,560	35,954	3,128

### 2-4-4 Profile of Idlib Muhafazat

#### (1) Outline

The Muhafazat of Idlib has a population of about 840,000 over a land area of 6,100 sq. km. In this muhafazat, there are 29 health centers and two hospitals under the Ministry of Health. The Health Directorate of this muhafazat, the garage of this Health Directorate for ambulances, Al Watani Hospital, and Ibn Sina Hospital are all located on

the same premises. Furthermore, Al Watani Hospital and Ibn Sina Hospital are connected with an underground pathway.

1. Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital)	103 beds @
Ibn Sina Hospital (general hospital)	100 beds @

2. Health Centers under the Ministry of Health

In the urban areas of Idlib	9 health centers
In the surrounding areas of Idlib	20 health centers

The following table shows the annual total numbers of emergency patients in Idlib Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	65,617	100	100
	Inpatient	21,757	100	100
1988	Outpatient	-	-	-
	Inpatient	-	-	-
1989	Outpatient	48,927	74.5	74.5
	Inpatient	20,018	92	92
1990	Outpatient	53,589	81.7	109.5
	Inpatient	22,725	104.4	113.5
1991	Outpatient	46,169	70.3	86.1
	Inpatient	24,342	111.9	107.1

(2) State of Ambulance Stationing

The Health Directorate of Idlib Muhafazat administers ambulance mobilization, and all the ambulances of this Health Directorate are stationed at its garage.

## **1) Communications System**

Emergency calls for ambulances are received any time at the garage of the Health Directorate through an ordinary telephone line and another telephone line which is restricted only for reception (telephone number: 110). Emergency calls for ambulances can be also received by Al Watani Hospital and Ibn Sina Hospital, both of which are located next to the garage.

All the health centers in this muhafazat are connected to the Health Directorate with direct telephone lines. This communications system facilitates the mobilization of not only ambulances but also doctors, nurses, and paramedics from the above mentioned hospitals.

## **2) Staff Arrangement**

A system of 24-hour ambulance mobilization is established with 12 drivers. These drivers are stationed at the garage of the Health Directorate, and they work in a triple shift, each for an 8 hour duty, which includes answering emergency calls. This triple shift is arranged for the following three time periods: 8 a.m. ~ 2 p.m., 2 p.m. ~ 8 p.m., and 8 p.m. ~ 8 a.m.

Doctors and nurses are also kept ready for emergency mobilization. Their work hours are arranged in a double shift covering the following two time periods: 8 a.m. ~ 2 p.m. and 2 p.m. ~ 8 p.m.

## **3) Checkup and Repair**

The garage of the Health Directorate has a workshop, where all the ambulances are taken care of for daily checkup, oil change, tire replacement, and simple repairs. However, repairs which cannot be dealt with at the garage are carried out by mechanics at the private garage which has a vehicle maintenance agreement with the Health Directorate.

### (3) Present State of Emergency Departments

#### 1) Al Watani Hospital

##### a. Profile

Specialties :general surgery, plastic surgery, urology, otorhinolaryngology, ophthalmology, obstetrics and gynecology

Number of Beds :103 beds

Al Watani Hospital was instituted as a general hospital in 1984. At present, this hospital is undergoing building expansion to accommodate a total of 180 hospital beds. This hospital mainly performs surgeries. If internal medicine is concerned, then patients are referred to Ibn Sina Hospital. This hospital and Ibn Sina Hospital are connected with a pathway, and the size of this pathway is large enough to let vehicles pass through. As for medical equipment maintenance, this hospital does not have its own meaningful maintenance system to take care of the medical equipment used in the hospital. Even though the hospital has an engineer who is assigned for the task of maintaining medical equipment, when any breakdown occurs on the equipment, repairs are done by engineers dispatched either from the Maintenance Center of the Ministry of Health in Damascus or from suppliers who are obliged by maintenance agreements.

This hospital is equipped with a power generator capable of generating 360 kVA, which is operated for lighting operation theaters, etc. during the scheduled power cut-outs.

The following table accounts for the staff of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
-	21	2	28	7	21	8

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
12	89	17	5	12	98

The following table lists main items of medical equipment used in this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
Auto clave	4	Japan	1984	Operative
Shadowless lamp	4	Japan	1990	Operative
Defibrillator	1	Poland	1984	Operative
Aspirator	3	Japan, Canada	1985	Operative
Anesthesia	1	UK	1992	Operative
Operation table	4	Japan (1unit )	-	Operative
X-ray apparatus	2	USA, Japan	1985	1unit operative
Ventilator	1	UK	1992	Operative
Fundus camera	2	Germany, UK	1988 1992	Operative

#### b. Emergency Department

As the emergency department of this hospital is currently under construction, this department is operating with temporary facilities substituting for a reception counter, consulting rooms, and emergency operation theaters. This emergency department shares X-ray rooms, a room for ICU's, and a clinical laboratory with other departments of the hospital.

The following table lists main items of medical equipment used in this emergency department.

Major equipment	Q'ty	Country	Procured year	Comment
X-ray apparatus	1	USA	1991	Operative
Emergency resucitator	1	UK	1998	Operative
Hot air sterilizer	2	Germany	1998	Operative

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
23,975	11,692	-	-	24,990	13,879	31,634	13,028	24,914	11,330



## 2) Ibn Sina Hospital

### a. Profile

Specialties :cardiology, pediatrics, artificial dialysis, neurology, general internal medicine, thyroidology, and psychiatry

Number of Beds :103 beds

Ibn Sina Hospital was instituted as a general hospital in 1984. However, this hospital mainly deals in internal medicine. The hospital is equipped with a power generator capable of generating 330 kVA, which is operated during the scheduled power cut-outs. This hospital has a maintenance section to take care of its medical equipment, but the system is not good enough for the hospital to perform repair work on its own. Thus, repairs are usually done by engineers dispatched either from the Maintenance Center of the Ministry of Health in Damascus or from suppliers of medical equipment. Dialysis apparatus are maintained by the supplier because these apparatus are complex and not easily maintainable.

The following table accounts for the personnel arrangement of the hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
21	-	-	14	-	-	4

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
13	122	13	5	13	54

### b. Emergency Department

The emergency department of Ibn Sina Hospital has an ICU room, a clinical laboratory, and an examination room.

The following table lists main items of medical equipment installed in this emergency department.

Major equipment	Q'ty	Country	Procured year	Comment
Artificial dialysis equipment	4	USA	1986	Operative
Distiller	2	-	1990	Operative
Hot air sterilizer	1	Germany	1988	Operative

Major equipment	Q'ty	Country	Procured year	Comment
ECG 1ch	2	Japan	1991 1985	Operative
ECG 3ch	2	Japan, Germany	1988	Operative
Defibrillator	2	Japan, UK	1990	Operative
Central monitor	1	Japan	1990	Operative
ECG monitor	6	Japan, Germany	1990 1987	Operative
Hot air sterilizer	1	Germany	1985	Operative
Suction device	1	Japan	-	Operative

The following table shows the annual numbers of emergency patients treated at Ibn Sina Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
41,696	10,065	-	-	23,937	6,139	21,955	9,697	21,255	13,012

## 2-4-5 Profile of Lattakia Muhafazat

### (1) Outline

The Muhafazat of Lattakia is located in the coastal region along the Mediterranean Sea, and it has a population of about 760,000 over a land area of 2,300 sq. km. There are mountain ranges and valleys in the northern part of this muhafazat, and villages are spotted in this rugged region. Snowing in the winter makes the traffic in this region very difficult. The Muhafazat of Lattakia was the first to establish an emergency care system in the Syrian Arab Republic. The accessibility to hospital bed is 817 people per bed, which number is the third smallest after Damascus City and Swaidda Muhafazat. There are 50 health centers, two hospitals under the Ministry of Health, and one hospital under the Ministry of Higher Education. Al Assad University Hospital, which is a general

hospital with 240 beds under the Ministry of Higher Education, is equipped with a CT scanner.

1. Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital) 433 beds @  
 Jableh Hospital (general hospital) 124 beds @

2. Health Centers under the Ministry of Health

In the urban areas of Lattakia 13 health centers  
 In the surrounding areas of Lattakia 38 health centers

3. Hospitals under the Ministry of Higher Education

Al Assad University Hospital (general hospital) 240 beds @

The following table shows the annual total numbers of emergency patients in Lattakia Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1988	Outpatient	65,991	100	100
	Inpatient	23,958	100	100
1989	Outpatient	41,538	74.5	74.5
	Inpatient	17,251	74.5	74.5
1990	Outpatient	47,970	74.5	74.5
	Inpatient	21,820	74.5	74.5
1991	Outpatient	48,149	70.3	74.5
	Inpatient	19,386	74.5	74.5

## **(2) State of Ambulance Stationing**

The Health Directorate of Lattakia Muhafazat has 22 registered ambulances, which are all stationed at the garages of the Health Directorate. As most of these vehicles are old and dilapidating, condition similar to those of the vehicles of other muhafazats, only a half of them is really working. Among these vehicles in good condition, there is one Fiat, which has been donated by Denmark. This vehicle is a 1989 model and furnished with medical equipment for emergency care.

There are mountain ranges and valleys in the northern part of this muhafazat, and villages are scattered in this rugged region. Although most roads in this region are paved and well maintained despite such adverse natural conditions as curves and slopes, snowing in the winter impairs the traffic, often preventing ordinary vehicles from driving on mountainside roads.

A lack of an effective communications system and a shortage of ambulances as well as the aging of the existing vehicles all impedes the emergency transportation of patients. In these circumstances, patients in need of emergency care are often brought to the hospital by vehicles which are available to the patients, e.g., cars of their relatives or taxis.

### **1) Communications System**

A system for around-the-clock ambulance mobilization is established by arranging the staffs of the garage and hospitals of the City of Lattakia to work in a three shift. Emergency calls for ambulances are made by dialing directly 110 for ambulances or 99 for the police station, in the city. People living in the country call their nearest health centers for ambulances. These health centers, in turn, arrange dispatches of ambulances either by sending ambulances on hand or by requesting the garage to send ambulances. These health centers are open until 2 p.m. After 2 p.m., emergency calls for ambulances are received by the police stations of rural districts, and these police stations take care of ambulance mobilization in addition to their original profession. Ambulances stationed at health centers in the country are mobilized by the directors of these health centers. The task of ambulance mobilization is shifted in the afternoon to the police chiefs of the areas where these respective health centers are located.

## 2) Staff Arrangement

A system of 24-hour ambulance mobilization is established by keeping two ambulances ready at both Al Watani Hospital and the garage. These ambulances stationed are operated by 12 drivers in a three shift, each working for an 8 hour duty, which includes answering emergency calls. This three shift is arranged for the following three time periods: 8 a.m. ~ 2 p.m., 2 p.m. ~ 8 p.m., and 8 p.m. ~ 8 a.m.

Doctors and nurses assigned for emergency care are on duty in accordance with the following time table and are ready for emergency mobilization.

6 a.m. ~ 2 p.m.	2 p.m. ~ 10 p.m.	10 p.m. ~ 6 a.m.
2 doctors	2 doctors	none
4 nurses	5 nurses	4 nurses

## 3) Checkup and Repair

The Health Directorate has four or five mechanics at its garage. In addition to such maintenance work as daily checkup and oil change, easy repairs on the vehicles are done by these mechanics. However, most vehicles are quite old, and the maintenance of these vehicles is becoming harder and harder. For instance, some vehicles extraordinary need refilling of water and oil even while they are on the road. Difficult repairs are carried out at private garages. Since these vehicles differ from one another in their vehicle models, it is very difficult to procure replacement parts for repairs. In some cases, they have to go to Lebanon or Jordan, looking for parts.

### (3) Present State of Emergency Departments

#### 1) Al Watani Hospital

##### a. Profile

Specialties :general hospital

Number of Beds :433 beds

Al Watani Hospital, which was established in 1945, is located in the coastal region of the Mediterranean Sea. It is one of the largest hospitals among all the base

hospitals of the Syrian Arab Republic, and it has a total of 433 hospital beds. The Health Directorate of this muhafazat, its garage for ambulances, a nursing school, and this hospital are all located on the same block. Since this hospital is located close to the shore, special care is provided for the maintenance of its medical equipment. Bedside monitors, defibrillators, ECG monitors, etc. are protected against dust and moisture. Unlike the hospitals of other muhafazats, the maintenance section of this hospital is provided with tools necessary for performing maintenance work. These tools are as good as those used at the Maintenance Center of the Ministry of Health in Damascus. Digital testers, analog testers, oscilloscopes, and other basic tools are available though their quantities are small.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
20	42	7	25	25	-	14

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
28	405	9	8	-	67

The following table lists main items of medical equipment used in this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
X-ray apparatus	1	Japan	1980	Out of order
Shadowless light	8	Japan, Germany	-	Operative
Operation table	6	Japan	-	Operative
Hot air sterilizer	1	Germany	-	Operative
Electro surgical unit	2	USA, Germany	-	Operative
Ultraviolet sterilizer	1	Poland	-	Operative
Anesthesia	4	US, Japan, Netherlands	-	Operative
Ventilator	4	Japan	-	Operative

**b. Emergency Department**

As the emergency department of this hospital is currently under renovation, emergency patients are being treated in the surgical department.

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.

1988		1989		1990		1991	
Outpatient	Inpatient	Outpatient	Inpatient	Outpatient	Inpatient	Outpatient	Inpatient
46,613	19,672	34,709	15,666	34,135	13,494	34,248	24,248

**2) Jableh Hospital**

**a. Profile**

Specialties : general hospital

Number of Beds : 124 beds

Jableh Hospital was instituted as a general hospital in 1975. It serves the population of 190,000 who are living in the southern part of Lattakia Muhafazat.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
9	13	2	6	6	-	10

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
14	202	5	7	4	53

The following table lists main items of medical equipment used in the operating theaters.

Major equipment	Q'ty	Country	Procured year	Comment
Shadowless light	2	Germany Poland	-	Operative
Anesthesia	2	UK India	-	Out of order
Operation table	2	France	-	1unit operative
Electro surgical unit	2	USA	-	Out of order

The following table lists main items of medical equipment installed in the ICU rooms.

Major equipment	Q'ty	Country	Procured year	Comment
Shadowless light	1	Italy	-	Operative
Sterilizer	5	France	-	2units out of order
Ventilator	1	Denmark	-	Operative

#### b. Emergency Department

The emergency department of this hospital receives daily an average of 110 emergency patients for surgical treatments and 10 emergency patients for treatments in internal medicine. These numbers include various cases of emergency from scratches to serious cases. Because this emergency department is poorly equipped, patients with severe conditions are sent to Al Watani Hospital in the City of Lattakia or to Damascus Hospital.

The following table lists main items of medical equipment installed in this emergency department.

Major equipment	Q'ty	Country	Procured year	Comment
ECG	2	Japan	-	1unit out of order
Defibrillator	3	Japan, Germany	-	1unit out of order
ECG monitor	1	Japan	-	Operative
Ventilator	2	USA	-	1unit out of order
Hot air sterilizer	1	Germany	-	Operative
Suction device	3	USA	-	Out of order

The following table shows the annual numbers of emergency patients treated at Jableh Hospital for the 4 year period from 1988 to 1991.



1988		1989		1990		1991	
Outpatient	Inpatient	Outpatient	Inpatient	Outpatient	Inpatient	Outpatient	Inpatient
19,378	4,286	6,829	1,585	13,835	8,326	13,901	4,100

## 2-4-6 Profile of Tartous Muhafazat

### (1) Outline

The Muhafazat of Tartous is one of the muhafazats which are located in the coastal region facing the Mediterranean Sea. However, the eastern part of this muhafazat is hilly and mountainous. It has a population of about 620,000 over a land area of 1,890 sq. km. There are 35 health centers and one hospital under the Ministry of Health in this muhafazat. At present, Al Watani Hospital is the only hospital which exists in this muhafazat under the control of the Ministry of Health. However, another hospital, which is currently under construction at a site only 20 minutes away from Al Watani Hospital by car, is going to be opened with 450 beds in 1993. This new hospital includes a nursing school, and this nursing school is to train a number of nurses to meet future needs.

#### 1. Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital)                      156 beds @

#### 2. Health Centers under the Ministry of Health

In the urban areas of Tartous                                      11 health centers

In the surrounding areas of Tartous                              24 health centers

#### 3. Hospitals under the Ministry of Social Affairs

Al Ommali Hospital (general hospital)                      53 beds

The following table shows the annual total numbers of inpatients and outpatients treated at all the emergency departments of Tartous Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	40,494	100	100
	Inpatient	9,009	100	100
1988	Outpatient	22,577	55.8	55.8
	Inpatient	6,943	77	77
1989	Outpatient	28,882	71.3	127.9
	Inpatient	8,211	91.1	118.3
1990	Outpatient	32,444	80.1	112.3
	Inpatient	1,380	15.3	16.8
1991	Outpatient	36,155	89.3	111.4
	Inpatient	17,975	199.5	1302.5

## **(2) State of Ambulance Stationing**

All ambulances of the Health Directorate of this muhafazat are managed at the garage of the Health Directorate, and this garage is located next to the office building of the Health Directorate. There are many mountainous areas in this muhafazat, and it snows in the winter. The frequency of ambulance mobilization is about 50 times a day, and six or seven ambulances are sent to Damascus every day. Most of these emergency patients transferred to hospitals in Damascus are victims of traffic accidents.

### **1) Communications System**

Ambulance drivers who are stationed at the garage of the Health Directorate receive emergency calls for ambulances with two telephone sets installed there.

### **2) Staff Arrangement**

A system of 24-hour ambulance mobilization is established by keeping three ambulances always ready at the garage. Eleven drivers work in groups, and each group, which consists of 3 drivers, works in a rotation of a 24 hour duty followed by two days off.

### 3) Checkup and Repair

The garage of the Health Directorate has a workshop, where daily checkups, oil changes, and easy repairs are carried out on the vehicles are carried out. Major repairs are taken care of at the private garage which has a vehicle maintenance agreement with the Health Directorate.

### (3) Present State of Emergency Departments

#### 1) Al Watani Hospital

##### a. Profile

Specialties :general hospital (abdominal surgery, orthopedic surgery, urology, neurosurgery, obstetrics and gynecology, ophthalmology, otorhinolaryngology, pediatrics, internal medicine, and radiology)

Number Beds :156 beds

Al Watani Hospital is the only hospital which exists in this muhafazat under the control of the Ministry of Health. The emergency department of Al Watani Hospital is currently under renovation, and the construction work will be completed by April, 1993. This hospital does not have ICU rooms at present. The most prevalent diseases are injuries and intoxication. Then, the following diseases line up in the order of prevalence: perinatal disease, alimentary disease, respiratory disease, hypertension, etc. The causes of death in the order of frequency are cardiovascular, injuries and intoxication, respiratory disease, abdominal disease, cancer, etc.

The staff of this hospital consists of 143 doctors, 291 nurses, 28 X-ray technicians, 34 laboratory technicians, and 134 midwives. The hospital is currently holding a large number of staffers in preparation for the supply of personnel that will be required soon for the opening of a new hospital. This new hospital, which will be equipped with 450 hospital beds, is now under construction in this muhafazat.

Al Watani Hospital has a maintenance section to take care of its medical equipment. This maintenance section provides 24-hour service with a staff consisting of a chief engineer (specialty in electronics), one electronics engineer, one electrical engineer, and seven graduates of a technical college in medical care. Another hospital

(with 53 hospital beds), which is under the control of the Ministry of Social Affairs, is located on the same premises.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
69			74			28

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
34	291	10	-	-	-

The following table lists main items of medical equipment used in the operating theaters of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
Suction device	6	Syria, UK, Germany	-	-
Anesthesia	5	India, Japan	-	-
X-ray	1	Japan	-	-
Shadowless light	7	Japan	-	-
Defibrillator	1	France	-	-
ECG	1	Japan	-	-
Sterilizer	5	Japan, Germany	-	-
Ventilator	2	UK	-	-
Operation table	6	Japan, USA, UK	-	-
Fiber scope	3	Germany, UK	-	-
Ophthalmology operation microscope	3	Germany, Japan	-	-

#### **b Emergency Department**

The following table lists main items of medical equipment used in this emergency department.

Major equipment	Q'ty	Country	Procured year	Comment
Suction device	1	Syria	-	-
Sterilizer	1	Germany	-	-
Ventilator	2	Austria	-	-

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
19,292	9,299	24,786	9,544	26,270	9,497	32,423	7,669	42,836	8,482

## 2-4-7 Profile of Homs Muhafazat

### (1) Outline

Of all the muhafazats of the Syrian Arab Republic, the Muhafazat of Homs has the largest area, 42,220 sq. km, with a population of 1,167,000. Since Homs City is located at the center of the nation's transportation system, many patients brought into the emergency departments of the hospitals in this muhafazat are victims of traffic accidents.

The medical facilities of this muhafazat are listed below.

#### 1. Hospitals under the Ministry of Health (The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital)	314 beds	@
Al Amrad Al Sariah Hospital (general hospital)	39 beds	
Tadmour Hospital (general hospital)	45 beds	@
Ibn Al Walid Hospital (general hospital)	156 beds	@

#### 2. Health Centers under the Ministry of Health

In the urban areas of Homs	14 health centers
In the surrounding areas of Homs	39 health centers

#### 3. Hospitals under the Ministry of Social Affairs

Al Ommali Hospital (general hospital)	65 beds
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The following table shows the annual total numbers of inpatients and outpatients treated at all the emergency departments of Homs Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	85,487	100	100
	Inpatient	24,974	100	100
1988	Outpatient	92,866	108.6	108.6
	Inpatient	27,767	111.2	111.2
1989	Outpatient	48,934	57.2	52.7
	Inpatient	16,953	67.9	61.1
1990	Outpatient	95,191	111.4	194.5
	Inpatient	26,975	108	159.1
1991	Outpatient	128,440	150.2	193.7
	Inpatient	32,769	131.2	121.5

## (2) State of Ambulance Stationing

All ambulances and ambulance drivers of the Health Directorate of this muhafazat are managed at the garage of the Health Directorate, and this garage is located on the premises of Al Watani Hospital. In addition to the ambulances kept at the garage of the Health Directorate, ambulances are also stationed at the following medical facilities:

Al Watani Hospital	4 ambulances
Ibn Al Walid Hospital	2 ambulances
Al Amrad Al Sariah Hospital	2 ambulances
Tadmour Hospital	3 ambulances
Al Kalyatani Health Center	1 ambulance
Karamuze Health Center	1 ambulance

### 1) Staff Arrangement

A system of 24-hour ambulance mobilization is established at each hospital in the city by arranging the work hours of its staff in a rotation of a 24 hour duty followed by two days off. The health centers which are located in rural areas and have ambulances keep emergency staffs ready for the period from 8 a.m. to 2 p.m.

## 2) Communications System

Emergency calls for ambulances are received by telephone operators at each hospital as well as at each health center.

## 3) Checkup and Repair

Each hospital has a garage, and daily checkups on the vehicles are carried out there. However, repairs are carried out at private garages.

### (3) Present State of Emergency Departments

#### 1) Al Watani Hospital

##### a. Profile

Specialties : general dispensary, ophthalmology, emergency treatment, radiology, cardiosurgery, general surgery, otorhinolaryngology, orthopedic surgery, internal medicine, and urology

Number of Beds : 314 beds

Al Watani Hospital was established in 1949, and it is a major base hospital in Homs Muhafazat. However, as its facilities are dilapidating, it cannot provide sufficient medical services. Patients with severe cases are transferred to hospitals in Damascus. In 1992, the staff of this hospital consists of 123 doctors, 263 nurses, 57 X-ray technicians, 66 laboratory technicians, and 25 midwives. This staff serves a population of about 810,000.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
20	33	27	23	20	-	57

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
66	263	51	6	28	265

The following table lists main items of medical equipment used in the operating theaters of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
Operation table	9	Many countries	Before 1980	Operative
Anesthesia	9	Many countries	1980-1985	Operative
Shadowless light	9	Many countries	1982	Operative
Electro surgical unit	3	Germany, UK, Netherlands	1960-1985	Operative
Ventilator	1	Holland	1980	Operative
Suction device	12	Many countries	1985-1990	Operative
X-ray	1	Holland	1980	Operative
Sterilizer	6	Many countries	1980-1990	Operative

The following table lists main items of medical equipment used in the ICU rooms of this hospital.

Major equipment of ICU	Q'ty	Country	Procured year	Comment
Defibrillator	4	Japan, Netherlands	1985-1991	Operative
ECG monitor	9	Japan, Netherlands	1985-1991	Operative
Ventilator	1	Holland	1986	Operative

#### b. Emergency Department

The emergency department of this hospital has a reception counter and three examination rooms. Emergency patients are first diagnosed in these examination rooms. If the patient's case is minor, then treatment is given at the examination room, and then the patient is dismissed. If it is severe, then the patient is moved to the department of internal medicine or to the surgery department for a thorough examination and treatment.

91,795 emergency patients were received by this hospital in 1991. Among those patients, 10,366 patients required some kinds of operations.

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.



1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
77,931	23,712	86,826	26,551	46,747	16,567	78,677	17,083	91,272	16,865

## 2) Tadmour Hospital

### a. Profile

Specialties : general hospital

Number of Beds : 45 beds

Tadmour Hospital is located in Palmira. As Palmira is a tourist resort located halfway between Deirezzor and Damascus, it has roads and highways with heavy traffic. Because of its location, this hospital serves not only as a hospital for the population living in the vicinity of this tourist resort but also as an ambulance relaying center for facilitating the transportation of patients from Hasakeh Muhafazat and Deirezzor Muhafazat, which are located north of Tadmour, to Damascus, and vice versa. If the conditions of patients who are being transported get worse on the way, then they are treated at the emergency department of this hospital. If ambulances experience any trouble on the way, then they are also taken care of at this hospital. In addition to cooling water and fuel for vehicles, oxygen cylinders are offered here for the patients in need of supply of oxygen during the transportation. At present, a building to house new operation theaters for the emergency department and another building for laundry use are both under construction in the vacant lot behind the hospital.

### b. Emergency Department

Tadmour Hospital has an emergency department to perform examinations and treatments for emergency outpatients. However, this hospital as well as the emergency department is relatively small, and its facilities are not sufficient to treat all emergency patients. Examinations and X-ray diagnoses for emergency patients are performed in cooperation with other departments of this hospital. If the patient's condition is severe, then the patient is transferred to a hospital in Damascus or in Homs. During the rainy season, about 450,000 of Bedouins come into this muhafazat to live in oases, which are located around Tadmour. This migration of Bedouins brings an excessive number of patients for the hospital to deal with.

The following table shows the annual numbers of emergency patients treated at Tadmour Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
7,556	1,262	6,040	1,216	2,187	386	7,280	1,386	11,264	1,717

## 2-4-8 Profile of Hama Muhafazat

### (1) Outline

The Muhafazat of Hama has a land area of 8,880 sq. km with a population of about 1,010,000. Since the important part of the nation's transportation system resides in this muhafazat as in the Muhafazat of Homs, many major highways run through this muhafazat.

There are 54 health centers and two hospitals under the Ministry of Health in this muhafazat.

#### 1. Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital)	286 beds @
Salameih Hospital (general hospital)	154 beds

#### 2. Health Centers under the Ministry of Health

In the urban areas of Hama	16 health centers
In the surrounding areas of Hama	38 health centers

The following table shows the annual total numbers of inpatients and outpatients treated at all the emergency departments of Hama Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	56,820	100	100
	Inpatient	22,809	100	100
1988	Outpatient	63,741	112.2	112.2
	Inpatient	27,415	120.2	120.2
1989	Outpatient	73,630	129.6	115.5
	Inpatient	31,445	137.9	114.7
1990	Outpatient	63,227	111.3	85.9
	Inpatient	28,126	123.3	89.4
1991	Outpatient	81,239	143	128.5
	Inpatient	30,635	134.3	109

## (2) State of Ambulance Stationing

In addition to those stationed at the garage of the Health Directorate, ambulances are stationed at the following medical facilities:

Al Watani Hospital	6 ambulances
Salameih Hospital	2 ambulances
Salhub Health Center	1 ambulance

### 1) Communications System

Two telephone sets are specifically kept for receiving emergency calls (telephone number: 110) at the garage of the Health Directorate, where ambulances are stationed. In addition, another telephone set is installed there for communicating with hospitals. Emergency calls from the police station or fire house are received only when there are traffic accidents, fires, or other disasters.

### 2) Staff Arrangement

A system of 24-hour ambulance mobilization is established at the garage of the Health Directorate by arranging the work hours of ambulance drivers in a three shift. Six drivers are kept ready for the period from 8 a.m. to 2 p.m., three drivers for the period from 2 p.m. to 8 p.m., and two drivers for the period from 8 p.m. to 8 a.m. of the following morning.

### 3) Checkup and Repair

Daily checkups on the vehicles are carried out at each garage where they are stationed. However, repairs are carried out at private garages.

### (3) Present State of Emergency Departments

#### 1) Al Watani Hospital

##### a. Profile

Specialties : general surgery, cerebro surgery, orthopedic surgery, cardiology, obstetrics and gynecology, ophthalmology, otorhinolaryngology

Number of Beds : 286 beds

Al Watani Hospital was established in 1975, and it is a base hospital of Hama Muhafazat. This hospital has the following facilities: a ward for cardiology (with 70 beds), CCU's (11 beds), two operation rooms and a ward for otorhinolaryngology (30 beds), one operation room and a ward for ophthalmology (20 beds), three operation rooms and a ward for general surgery (70 beds), one operation room and a ward for cerebro surgery and orthopedic surgery (40 beds), one operation room and a ward for obstetrics and gynecology (40 beds), a labor room, an artificial dialysis room (12 beds), three X-ray rooms, an ultrasonic-diagnosis room, a laboratory, etc.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
74	38	11	68	15	1	32

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
28	182	16	-	15	-

The following table lists main items of medical equipment used in this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
Anesthesia	1	India	-	Operative
Suction device	3	Japan, UK	-	Operative
Fiberscope	1	Belgium	-	Out of order
Shadowless light	3	Poland	-	Operative
Operation table	1	-	-	Operative
Operation microscope	2	Germany	-	Operative

Major equipment	Q'ty	Country	Procured year	Comment
Anesthesia	1	India	-	Operative
Suction device	3	Japan, UK	-	Operative
Fiberscope	1	Belgium	-	Out of order
Shadowless light	3	Poland	-	Operative
Operation table	1	-	-	Operative
Operation microscope	2	Germany	-	Operative

Major equipment of ICU	Q'ty	Country	Procured year	Comment
ECG	1	Japan	-	Operative
Defibrillator	1	Japan	-	Operative

#### b. Emergency Department

Al Watani Hospital receives about 300 outpatients a day. These patients are examined at the emergency department. However, since the emergency department is small and does not have much medical equipment, they are treated at other departments of the hospital. After the treatment, 20 ~ 30 patients of the 300 patients treated daily are really hospitalized. This hospital is capable of performing a degree of cerebral surgery that can treat subarachnoid hemorrhage. However, since the facilities of this hospital is limited, the hospital cannot provide patients with intensive care necessary after their major operations. Therefore, a specialized doctor judges whether the patient will require special treatments which are not available at this hospital before a major operation. If the patient does require such treatments, then the patient is given only first aid and immediately sent to another hospital in Damascus. As a result, about 50 patients a month are transferred to hospitals in Damascus, and only 1 ~ 3 patients a month really receive operations at this hospital. Although this emergency department has two ICU's, it does not have much medical equipment. So, most of the emergency patients are moved into the surgical ward of this hospital. The hospital has a plan to expand the emergency department by

demolishing the ward for pharmacy and ophthalmology and then by constructing a new building.

The following table lists main items of medical equipment installed in this emergency department.

Major equipment	Q'ty	Country	Procured year	Comment
X-ray	1	Korea	-	Operative
Auto developer	1	Japan	-	Operative

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
40,245	16,731	45,472	18,963	49,263	21,186	39,839	20,639	55,818	22,464

## 2. Salameih Hospital

### a. Profile

Specialties: general hospital

Number of Hospital Beds: 154 beds

Salameih Hospital is about 100 km away from Al Watani Hospital.

### b. Emergency Department

Salameih Hospital receives about 100 emergency patients a day. Among them, 20 ~ 30 patients are really hospitalized. Patients with severe cases who are not treatable here are sent to Al Watani Hospital. This hospital has an emergency department, which operate around the clock. However, this emergency department has only an examination and treatment room. The hospital has a plan to expand the emergency department to include an emergency operating room and an ICU room by refurbishing the ground floor of the hospital building. At present, the emergency department shares the X-ray room, laboratory, and operation theaters with other departments.

The following table shows the annual numbers of emergency patients treated at Salameih Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
16,575	6,078	18,269	8,452	24,362	10,259	23,388	7,487	24,421	8,171

## 2-4-9 Profile of Hasakeh Muhafazat

### (1) Outline

The Muhafazat of Hasakeh is located in northern Syria, sharing borderlines with Turkey and Iraq. It has a land area of 23,330 sq km with a population of about 930,000.

There are 36 health centers and three hospitals under the Ministry of Health. In addition to these medical facilities, three 120-bed hospitals are under construction, each in Kameshli, Malekiah, and Lasain. The construction work of these hospitals started in 1985, but they are yet to be completed. There is no emergency hospitals in Lasain at present, so emergency patients are transported to Al Watani Hospital of Hasakeh Muhafazat.

The following list accounts for the medical facilities of Hasakeh Muhafazat.

#### 1 Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital)	200 beds	@
Al Kameshli Hospital (general hospital)	68 beds	@
Al Malekiah Hospital (general hospital)	35 beds	@

#### 2 Health Centers under the Ministry of Health

In the urban areas of Hasakeh Muhafazat	13 health centers
In the surrounding areas of Hasakeh Muhafazat	23 health centers

The statistics available at the Ministry of Health shows that the number of emergency patients had reached 29,560 in 1991 in this muhafazat. Major causes of emergency cases are accidents and intoxication, digestive disease, respiratory disease,

urinary disease, and circulatory disease, respectively in the order of their prevalence. The major cause of deaths is traffic accidents.

The following table shows the annual total numbers of inpatients and outpatients treated at all emergency departments of Hasakeh Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	39,406	100	100
	Inpatient	12,504	100	100
1988	Outpatient	44,615	113.2	113.2
	Inpatient	13,782	110.2	110.2
1989	Outpatient	52,555	133.4	117.8
	Inpatient	15,204	121.6	110.3
1990	Outpatient	46,485	118	88.5
	Inpatient	13,920	111.3	91.6
1991	Outpatient	66,657	169.2	143.4
	Inpatient	17,803	142.4	127.9

## (2) State of Ambulance Stationing

Ambulances are stationed at the following medical facilities including the central garage of the Health Directorate:

Hasakeh Central Garage	8 ambulances
Kameshli Garage	5 ambulances
Telhamis Health Center	1 ambulance
Armudah Health Center	1 ambulance
Malekiah Health Center	2 ambulances
Lasain Health Center	1 ambulance

### 1) Communications System

Emergency calls for ambulances (telephone number: Hasakeh 21724, Kameshli 26226, and Malekiah 5909) are received at each of the above mentioned garages and medical facilities.



## 2) Staff Arrangement

The Hasakeh Central Garage has 28 drivers, but twelve of them are really assigned to the task of driving ambulances. These ambulance drivers work on a 24-hour duty followed by two days off in order to operate around-the-clock ambulance services. Two ambulances are always stationed at this garage, and other two ambulances are also stationed at Al Watani Hospital.

The Kameshli Garage has nine drivers and four guards, and five of these drivers really take the role of driving ambulances. Four drivers work for 24 hours every other day in rotation. The remaining another ambulance driver shuttles an ambulance between Kameshli and Aleppo, or Damascus. There is a system to call up a driver for long distance patient transportation even during the night. As for the health centers, one driver is stationed at each health center.

Doctors are kept at the emergency department. Two specialists in cardiosurgery work for the time period between 8 a.m. ~ 2 p.m. After that, they are replaced by three general practitioner. However, there is a system to call up a specialist when the patient's condition is too severe to be treated only by these general doctors. In addition, nurses are also assigned to the task in a three shift. Two nurses are kept for the time period between 8 a.m. ~ 2 p.m., and one nurse is assigned for 2 p.m. ~ 8 p.m. and another nurse for 8 p.m. ~ 8 a.m.

## 3) Checkup and Repair

Easy checkups on the vehicles are carried out at each garage where ambulances are stationed. However, repairs are carried out at private garages.

### (3) Present State of Emergency Departments

#### 1) Al Watani Hospital

##### a. Profile

Specialties : general hospital

Number of Beds : 200 beds

Al Watani Hospital serves the local population of 450,000 with its staff consisting of 47 doctors, 84 nurses, 27 midwives, 8 X-ray technicians, and 14 laboratory technicians. Since the cardiosurgery ward of this hospital has CCU's, the hospital has organized a maintenance staff. This medical equipment maintenance staff consists of a total of six staffers: two electronics engineers, one mechanical engineer, one electrical technician, one electrical technician, and one mechanical technician. However, the reality is that tools and parts necessary for them to carry out the job are simply not available in the hospital. As a result, when any breakdown occurs on the equipment, repairs are done by engineers dispatched from the Maintenance Center of the Ministry of Health, which is located in Damascus, or from suppliers.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
2	2	22	3	3	15	8

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
14	84	6	14	8	129

The following table lists main items of medical equipment used in the operating theaters of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
X-ray	2	Japan	1977-1988	1unit out of order
Anesthesia	2	Netherlands	1983	Operative
Operation table	3	-	-	Operative
Shadowless light	8	Germany	-	Operative
Operation microscope	1	Sweden	-	Operative
Suction device	6	Syria, USA, Germany	-	2units out of order
Portable ultrasonic	1	Japan	-	Operative

The following table lists main items of medical equipment used in the ICU rooms of this hospital.

Major equipment of ICU	Q'ty	Country	Procured year	Comment
ECG	1	Japan	1991	Operative
Defibrillator	1	Japan	1991	Operative

## b) Emergency Department

The emergency department of Al Watani Hospital has only examination and treatment rooms and does not have ICU rooms. However, this hospital has a plan to expand the building to provide ICU rooms to the emergency department. At present, emergency patients in severe conditions are transferred to hospitals in Damascus after receiving first aid. If necessary, ambulances transporting these emergency patients are accompanied by doctors and nurses of the emergency department with medical equipment for first aid and resuscitation.

The following table lists main items of medical equipment installed in this emergency department.

Major equipment	Q'ty	Country	Procured year	Comment
Photometer	1	UK	1982	Operative
Sterilizer	1	Germany	1991	Operative
X-ray	1	Germany	1979	Operative

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
24,144	9,760	23,845	10,643	29,469	11,388	23,710	9,828	29,772	12,181

## 2) Kameshli Hospital

### a) Profile

Specialties: general surgery, obstetrics and gynecology, ophthalmology, otorhinolaryngosurgery, plastic surgery, urology, and artificial dialysis

Number of Hospital Beds: 68 beds

Kameshli Hospital is located close to the borderline with Turkey, within a distance of only 2 km. This hospital serves the local population of about 370,000, and it is also in charge of the six health centers which are scattered within a radius of 50 km from the hospital. The hospital staff consists of 24 specialized doctors, 10 general medical doctors, and 35 nurses.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
5	12	5	-	1	8	17

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
16	40	8	11	8	87

The following table lists main items of medical equipment used in the operating theaters of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
X-ray	2	Netherland, Germany	1981-1991	Operative
Anesthesia	3	Netherlands, USA	1979-1980	1 unit operative
Suction device	2	-	1981	Operative

The following table lists main items of medical equipment used in the ICU rooms of this hospital.

Major equipment of ICU	Q'ty	Country	Procured year	Comment
ECG	3	Japan	1985-1990	Operative
Defibrillator	1	Japan	1991	Operative
ECG monitor	1	UK	1985	Operative

#### b) Emergency Department

Kameshli Hospital is responsible for the emergency services of of Kameshli City. This hospital has only three ambulances, so emergency patients are brought to the hospital mostly in ordinary cars. Major causes of emergency cases are accidents and intoxication, digestive disease, respiratory disease, and infectious disease respectively in

the order of the number of occurrence. These top three causes are also seen in other muhafazats, but it is characteristic of this muhafazat to have infectious disease as the fourth major cause since infectious disease does not appear as a major cause on the lists for other muhafazats.

The following table shows the annual numbers of emergency patients treated at Kameshli Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
15,262	2,744	20,770	3,139	23,086	3,816	22,775	4,092	36,885	5,622

## 2-4-10 Profile of Deirezzor Muhafazat

### (1) Outline

The Muhafazat of Deirezzor is located in eastern Syria, and it has a land area of 33,060 sq. km with a population of 550,000.

There are 28 health centers and four hospitals under the Ministry of Health.

#### 1 Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Furaat Hospital (internal medicine)	83 beds @
Al Bokamal Hospital (obstetrics and gynecology)	50 beds @
Al Watani Hospital (obstetrics and gynecology)	124 beds @
Al Mayadin Hospital (general hospital)	92 beds @

#### 2 Health Centers under the Ministry of Health

In the urban areas of Deirezzor Muhafazat	14 health centers
In the rural areas of Deirezzor Muhafazat	14 health centers

The following table shows the annual total numbers of emergency patients treated at all the emergency departments of Deirezzor Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	45,497	100	100
	Inpatient	8,862	100	100
1988	Outpatient	43,116	94.8	94.8
	Inpatient	9,985	112.7	112.7
1989	Outpatient	48,533	106.7	112.6
	Inpatient	9,937	112.1	99.5
1990	Outpatient	48,426	106.4	99.8
	Inpatient	13,904	156.9	139.9
1991	Outpatient	58,522	128.6	120.8
	Inpatient	18,063	203.8	129.9

## (2) State of Ambulance Stationing

The Health Directorate is responsible for ambulance operation, and it has a garage on a lot behind Al Furaat Hospital. Ambulances mobilized in Deirezzor City are managed at this garage.

### 1) Communications System

During normal working hours (8 a.m. ~ 2 p.m.), emergency calls are received by either the garage of the Health Directorate or hospitals of this muhafazat. Outside the normal working hours, emergency calls are received by the police station. In any of these cases, the request is conveyed to the garage, and an ambulance is dispatched from the garage. Emergency phone numbers are as follows: police station, 112; garage of the Health Directorate, 190; Al Furaat Hospital, 22305; Al Bokamal Hospital, 203; Al Watani Hospital, 23080; and Al Mayadin Hospital, 1311.

### 2) Staff Arrangement

45 drivers are registered for driving ambulances at the garage of the Health Directorate. These drivers work for emergency services in a rotation of a 24-hour duty

followed by two days off. They are stationed appropriately at the garage of the Health Directorate or the above mentioned hospitals. If necessary, ambulances are accompanied by doctors and nurses who work at the emergency departments of these hospitals.

### 3) Checkup and Repair

Easy checkups on the vehicles are carried out at the garage of the Health Directorate. However, repairs are carried out at private garages.

### (3) Present State of Emergency Departments

#### 1) Al Watani Hospital

##### a. Profile

Specialties : obstetrics and gynecology

Number of Beds : 124 beds

Al Watani Hospital was established in 1930, and it is a major hospital in Deirezzor Muhafazat. According to the document received from the Ministry of Health, this hospital is classified as a hospital specialized in obstetrics and gynecology. However, as Al Furaat Hospital is specialized in internal medicine, Al Watani Hospital mostly provides medical services in surgery. This hospital has operation theaters and X-ray rooms, but it does not have an ICU room. This hospital has an emergency department, which operates around the clock with staff members who are arranged in a shift.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
-	25	7	-	17	4	13

Laboratory	Nurse	Clark	Driver	Emergency staff	Others
20	127	16	4	-	128

The following table lists main items of medical equipment used in the operating theaters of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
Anesthesia	3	UK	-	Operative
X-ray	1	Japan	-	Operative
Sterilizer	2	Germany	-	Operative
Operation table	2	-	-	Operative
Shadowless light	3	Poland	-	Operative
ECG	-	Japan	-	Operative

#### b. Emergency Department

The emergency department is under renovation at present as of September, 1992, and the construction work is scheduled to complete in March, 1993. The emergency department is currently operating in a temporary building which has a dispensary, an examination room, and a treatment room. This emergency department shares the laboratory and X-ray rooms of the hospital's main building with other departments. According to the hospital's statistics, there were 24,730 emergency patients in 1987, and there were 29,857 emergency patients in 1991. There was an increase of about 20% during that period.

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
24,730	2,663	24,341	3,176	27,679	3,522	26,654	4,338	29,857	4,038

## 2) Al Furaat Hospital

### a. Profile

Specialties : internal medicine

Number of Beds : 83 beds



Al Furaat Hospital was established in 1932 as a hospital specialized in internal medicine. Therefore, the hospital does not have facilities for operations. The staff consists of 27 doctors, 80 nurses, 6 X-ray technicians, and 26 laboratory technicians. These laboratory technicians carry out examinations on the specimens which are received not only from other departments of this hospital but also from Al Watani Hospital and other hospitals of this muhafazat. Therefore, this hospital has a separate building for laboratory facilities on the same premises.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
20	-	-	7	-	-	6

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
26	80	6	4	-	2

The following table lists main items of medical equipment used in the ICU rooms of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
ECG monitor	3	Japan, UK	-	Operative
Defibrillator	3	Japan, UK	-	Operative
ECG	1	Japan	-	Operative
Suction device	2	Syria	-	Operative

#### b. Emergency Department

Al Furaat Hospital has only one room for examining and treating emergency patients, and it doesn't have much medical equipment. Therefore, this hospital sends emergency patients with severe cases to Al Watani Hospital after providing only with first aid.

The following table lists main items of medical equipment used in the emergency department of this hospital.

Major equipment of operation room	Q'ty	Country	Procured year	Comment
Defibrillator	1	Italy	-	Operative
ECG	1	Japan	-	Operative
Suction device	1	USA	-	Operative

The following table shows the annual numbers of emergency patients treated at Al Furaat Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
5,100	963	8,062	5,260	8,560	3,845	5,467	4,949	9,611	7,055

### 3) Al Mayadin Hospital

#### a. Profile

Specialties : emergency treatment (district emergency hospital)

Number of Beds : 70 beds

Al Mayadin Hospital had been an emergency center until it was promoted to the current hospital status in 1990. This hospital provides emergency care to the people living in the district where it is located. Although this hospital specializes in emergency care, it does not have an ICU room.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
2	2	11	2	1	-	2

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
4	36	2	2	3	15

The following table lists main items of medical equipment used in the operating theaters of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
Anesthesia	2	Germany	1991	Operative
Suction device	3	Germany	1991	Operative
Sterilizer	4	Germany	1981	Operative
Operation table	2	Italy	1991	Operative
Shadowless light	3	Poland	1991	Operative
ECG	2	Japan	1990	Operative

## b. Emergency Department

Al Mayadin Hospital had been an emergency center before it was promoted to the current hospital status. Therefore, it does not have a separate emergency department. There are operation theaters in the hospital's main building. However, these operation theaters are poorly equipped, so patients with severe cases are sent to Al Watani Hospital, which is located in the provincial capital city.

The following table shows the annual numbers of emergency patients treated at Al Mayadin Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
9,161	4,834	6,305	792	6,559	1,311	6,780	1,460	89,7	1,543

## 2-4-11 Profile of Raqqah Muhafazat

### (1) Outline

The Muhafazat of Raqqah has a land area of 19,620 sq km with a population of about 470,000. This muhafazat is located in the nation's agricultural region, and it has a major highway, which connects Aleppo and Deirezzor.

There are 32 health centers and two hospitals under the Ministry of Health.

#### 1 Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital) 232 beds @  
 Dar Al Tawlid Hospital (surgery, obstetrics and gynecology) 37 beds @

2 Health Centers under the Ministry of Health

In the urban areas of Raqqah Muhafazat 14 health centers  
 In the surrounding areas of Raqqah Muhafazat 18 health centers

The following table shows the annual total numbers of emergency patients treated at all emergency departments of Raqqah Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	29,173	100	100
	Inpatient	14,372	100	100
1988	Outpatient	27,415	94	94
	Inpatient	18,331	127.5	127.5
1989	Outpatient	34,548	118.4	118.4
	Inpatient	18,055	15.6	98.5
1990	Outpatient	39,811	136.7	115.2
	Inpatient	22,893	159.3	126.8
1991	Outpatient	44,903	153.9	112.8
	Inpatient	22,704	158	99.2

(2) State of Ambulance Stationing

The Health Directorate of this muhafazat has 13 ambulances. Two of them are assigned for the transportation of patients to Damascus, and nine other vehicles are mobilized within Raqqah City. One vehicle is stationed as ambulance at Telababi, which is 100 km away from the provincial capital city, Raqqah. Also, a van is stationed as ambulance at the dam of the Lake Assad, Assaura. Patients not treatable at the hospitals of this muhafazat are transferred to hospitals in Aleppo or in Damascus. Since Aleppo is closer than Damascus, these patients with severe cases are first transferred to hospitals in Aleppo. When they are not treatable in Aleppo, then they are transported to hospitals in Damascus. This transferring system can sometime worsen the patient's condition. The Health Directorate, Al Watani Hospital, and the garage for ambulances are all located on

the same premises, and the Health Directorate is in charge of ambulance management. Ambulances are utilized as follows:

Within Raqqah City	9 ambulances
Between Telababi and Raqqah	1 ambulance
Between Assaura and Raqqah	1 ambulance
To Aleppo and Damascus	2 ambulances

### **1) Communications System**

In the City of Raqqah, emergency calls for ambulances are received through two telephones by the drivers who are kept ready at the ambulance mobilization center, which is located in Al Watani Hospital. Outside the city, emergency calls are made with telephone sets installed at health centers or with those installed at police branch offices. (telephone numbers: Al Watani Hospital 24826 and Dar Al Tawlid 21303)

### **2) Staff Arrangement**

The Health Directorate of Raqqah Muhafazat employs 53 drivers. Among them, 14 drivers are assigned to the task of 24-hour ambulance mobilization. Two ambulances are always kept ready at the garage of the Health Directorate, which is located in the City of Raqqah.

### **3) Checkup and Repair**

Easy checkups on the vehicles are carried out at the garage of the Health Directorate. However, repairs are carried out at private garages.

## **(3) Present State of Emergency Departments**

### **1) Al Watani Hospital**

#### **a. Profile**

Specialties : general surgery, plastic surgery, urology, ophthalmology, otorhinolaryngology, internal medicine, pediatrics, dermatology, and nephrology

Number of Beds : 232 beds

Al Watani Hospital was established in 1978 as a hospital which specializes in obstetrics and gynecology. Since then, the hospital has gone through a modification, and now it is a general hospital. This hospital has three operating rooms on the third floor of the hospital's main building and one ICU room on the first floor of the same building.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
20	25	-	8	11	-	13

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
14	150	5	20	45	40

The following table lists main items of medical equipment used in the operating rooms.

Major equipment	Q'ty	Country	Procured year	Comment
Anesthesia	4	Germany	1977	Operative
Suction device	4	UK	1977	Operative
Operation table	4	Germany	1977	Operative

The following table lists main items of medical equipment used in the ICU room.

Major equipment	Q'ty	Country	Procured year	Comment
ECG	1	Japan	1990	Operative
Defibrillator	1	Italy	1990	Operative
Suction device	1	France	1991	Operative
ECG monitor	1	Japan	1990	Operative

#### b. Emergency Department

The emergency department of this hospital has only a reception counter, an examination room, and a treatment room. This emergency department does not have an

ICU room, so emergency patients receive only first aid at the emergency department. Then, they are moved for specialized treatments to other respective departments, which operate in the hospital's main building. This hospital has a plan to construct ICU rooms for the emergency department, but the construction work has not started yet.

The following table lists main items of medical equipment installed in this emergency department.

Major equipment	Q'ty	Country	Procured year	Comment
Anesthesia	1	UK	1977	Operative
Operation table	1	France	1977	Operative
Suction device	1	France	1980	Operative
X-ray	1	USA	1991	Operative

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
26,130	11,329	22,807	13,723	29,154	12,643	30,529	13,611	38,796	16,597

## 2-4-12 Profile of Dera Muhafazat

### (1) Outline

The Muhafazat of Dera has a land area of 3,730 sq. km with a population of approx. 540,000. This muhafazat is located close to Damascus City, and it takes only a 40 minute drive to the south to reach Damascus. There are 54 health centers and one hospital under the Ministry of Health in this muhafazat, and this only hospital is Al Watani Hospital. This hospital is now undergoing full refurbishing.

#### 1 Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital) 256 beds @

#### 2 Health Centers under the Ministry of Health

In the urban areas of Dera  
 In the surrounding areas of Dera

12 health centers  
 42 health centers

The following table shows the annual total numbers of emergency patients treated at all emergency departments of Dera Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	52,500	100	100
	Inpatient	15,246	100	100
1988	Outpatient	36,242	69	69
	Inpatient	14,890	97.7	97.7
1989	Outpatient	32,875	62.6	90.7
	Inpatient	11,913	78.1	80
1990	Outpatient	53,235	101.4	161.9
	Inpatient	30,249	198.4	253.9
1991	Outpatient	59,919	114.1	112.6
	Inpatient	43,848	287.6	145

## (2) State of Ambulance Stationing

The Health Directorate of Dera Muhafazat has a garage for ambulances at Al Watani Hospital, which is only ten minutes away on foot from the Health Directorate. The ambulances of the Health Directorate are stationed as follows:

At Al Watani Hospital, 15 ambulances (8 for within-the-city use, 2 as spare vehicles, 3 for emergency use in disaster, and 2 from WHO); and

For six rural districts, 8 ambulances (1 for each district and 2 as spare vehicles).

### 1) Communications System

During the normal working hours (8 a.m. ~ 2 p.m.), emergency calls for ambulances are received by Al Watani Hospital (phone number: 21206). Outside the working hours, emergency calls are received by the police station. In either case, ambulances are dispatched from the garage of the Health Directorate.



## **2) Staff Arrangement**

The Health Directorate of Dera Muhafazat employs 25 drivers and stations them at Al Watani Hospital, which is located in Dera City, and at some health centers in six rural districts. For Dera City, two ambulances are always kept ready at Al Watani Hospital. The system of 24-hour ambulance mobilization for the city is organized with eight drivers. They work in a three shift, covering the following three time periods: 8 a.m. ~ 2 p.m., 2 p.m. ~ 8 p.m., and 8 p.m. ~ 8 a.m. For the rural districts, the drivers assigned for ambulances which are stationed at rural health centers also work in a three shift for the same three time periods as mentioned above.

## **3) Checkup and Repair**

Easy checkups are carried out at the garage of the Health Directorate, and repairs are carried out at private garages.

## **(3) Present State of Emergency Departments**

### **1) Al Watani Hospital**

#### **a. Profile**

Specialties : surgery, internal medicine, pediatrics, obstetrics and gynecology, plastic surgery, ophthalmology, urology, and otorhinolaryngology

Number of Beds : 256 beds

Al Watani Hospital was established in 1945. It is the only hospital of Dera Muhafazat. This hospital provides medical services to the population of 540,000 living in this muhafazat. Besides the departments to offer treatments in the above listed specialties, this hospital has an emergency department, CCU's, artificial dialysis rooms, a clinical laboratory, X-ray rooms, a maintenance section, etc. The buildings of the hospital including the emergency department are now undergoing a renovation process, which is scheduled to complete in fiscal 1993.

The following table accounts for the personnel arrangement of this hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
55			32			11

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
35	232	8	8	-	142

The staff consists of 55 doctors (14 general surgeons, 7 obstetricians and gynecologists, 6 plastic surgeons, 3 urologists, 6 otorhinologists, 2 ophthalmologists, 9 physicians, 4 pediatricians, 1 radiologist, 1 pharmacist, and 2 doctors in other fields), 232 nurses, 11 X-ray technicians, 35 laboratory technicians, 33 midwives, 8 ambulance drivers, etc.

The following table lists main items of medical equipment used in the operation rooms of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
Anesthesia	9	UK, France, India	-	1 unit out of order
Suction device	9	UK, Germany	-	Operative
Operation table	9	Japan	-	Operative
Shadowless light	16	Japan	-	Operative

The following table lists main items of medical equipment used in the ICU rooms of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
ECG	2	Japan	-	Operative
Defibrillator	1	Japan	-	Operative
Suction device	1	Syria	-	Operative

#### b. Emergency Department

The emergency department of this hospital is now under renovation, and the construction work is planned to complete in 1993. At present, this department is

operating in a temporary building, which has only a reception and examination room and a treatment room. As expected in such conditions, this emergency department does not have much medical equipment. Therefore, patients who are seriously ill only receive first aid here. Then they are transferred to hospitals in Damascus, which is only 40 minutes away by car.

The following table shows the annual numbers of emergency patients treated at Al Watani Hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
52,500	15,246	36,242	14,890	32,875	11,913	53,235	30,249	59,919	43,848

## 2-4-13 Profile of Soaidda Muhafazat

### (1) Outline

The Muhafazat of Soaidda is located in southern Syria, sharing the borderline with Jordan. It has a population of about 140,000 over a land area of 5,550 sq. km. There are 27 health centers and one hospital under the Ministry of Health. This only hospital is Al Watani Hospital. The Health Directorate of this muhafazat has an office in the administration building of Al Watani Hospital because the Health Directorate does not have its own building.

#### 1 Hospitals under the Ministry of Health

(The hospitals marked with "@" are equipped with emergency departments.)

Al Watani Hospital (general hospital) 444 beds @

#### 2 Health Centers under the Ministry of Health

In the urban areas of Soaidda 7 health centers

In the surrounding areas of Soaidda 20 health centers

The following table shows the annual total numbers of emergency patients in Soaidda Muhafazat for the period from 1987 to 1991.

		Emergency patient	Rate based on 1987	Rate previous year
1987	Outpatient	32,291	100	100
	Inpatient	12,729	100	100
1988	Outpatient	31,391	97.2	97.2
	Inpatient	10,489	82.4	82.4
1989	Outpatient	37,115	114.9	118.2
	Inpatient	16,109	126.6	153.6
1990	Outpatient	39,089	121	105.3
	Inpatient	18,817	147.8	116.8
1991	Outpatient	35,743	110.7	91.4
	Inpatient	15,119	118.8	80.3

## (2) State of Ambulance Stationing

The Health Directorate of Soaidda Muhafazat and Al Watani Hospital are located on the same premises. They share a garage, and ambulances are maintained there.

### 1) Communications System

During the ordinary working hours (8 a.m. ~ 2 p.m.), emergency calls for ambulances are received by Al Watani Hospital (telephone number 21200). Outside the working hours, emergency calls are received by police stations. In either case, ambulances are dispatched from the garage of the Health Directorate.

### 2) Staff Arrangement

Three ambulances are always kept ready for mobilization at the garage of the Health Directorate. These vehicles are driven by 33 drivers who are employed by the Health Directorate. They are on duty in a three shift for the following three time periods: 8 a.m. ~ 2 p.m., 2 p.m. ~ 8 p.m., and 8 p.m. ~ 8 a.m. If necessary, doctors and nurses of the emergency department of Al Watani Hospital will accompany the ambulance, carrying instruments necessary for providing first aid.

### 3) Checkup and Repair

Easy checkups are carried out at the garage of the Health Directorate. However, repairs are carried out at private garages.

### (3) Present State of Emergency Departments

#### 1) Al Watani Hospital

##### a. Profile

Specialties : general surgery, surgery, otorhinolaryngosurgery, plastic surgery, internal medicine, urology, and pediatrics

Number of Beds : 444 beds

Al Watani Hospital of Soaidda Muhafazat was established in 1967, and this is the only national hospital of this muhafazat. Besides the facilities to house the departments which provide medical services in the above mentioned specialties, this hospital has X-ray rooms, a radiotherapy room, a clinical laboratory, a blood bank, an artificial dialysis room, an ICU room, etc. At present, this hospital is undergoing a process of building expansion. The emergency department and other facilities of this hospital are going to be expanded through this process. Since there are scheduled power cut-outs in this muhafazat, this hospital is equipped with three power generators, each capable of generating 650 kVA of electricity.

The following table accounts for the personnel arrangement of the hospital in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
26			19			9

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
25	363	14	9	15	94

The staff consists of 45 doctors, 363 nurses, 9 X-ray technicians, and 25 laboratory technicians.

The following table lists main items of medical equipment used in the operating rooms of this hospital.

Major equipment	Q'ty	Country	Procured year	Comment
Anesthesia	4	UK, France, USA	1986	2units out of order
Suction device	1	Syria	1986	Operative
Operation table	3	Japan	1986	Operative
Shadowless light	4	UK	1986	Operative
Sterilizer	6	Many countries	-	2units out of order
Fiberscope	1	Japan	1986	Operative

The following table lists main items of medical equipment used in the ICU room.

Major equipment	Q'ty	Country	Procured year	Comment
ECG monitor	2	Japan	1991	Operative
Defibrillator	4	Japan, USA	1990	Operative
ECG	2	USA	1989	Operative

#### **b. Emergency Department**

The emergency department of this hospital is now under construction, and this construction work is scheduled to complete in the beginning of 1993. At present, this emergency department is operating in a temporary examination and treatment rooms. Therefore, patients who are seriously ill are transferred, after receiving first aid, to hospitals in Damascus, which are accessible in only 30 minutes by car.

According to this hospital's statistics, there were 35,743 emergency patients in 1991. The most prevalent causes of emergency cases are accidents and intoxication, and then cardiac infarction is the next major cause. The major causes of deaths are the same as those of the emergency cases. Major diseases afflicting the patients who are treated in the ICU room are cardiac infarction, head injuries, renal insufficiency, bruises, etc., respectively.

The following table shows the annual numbers of emergency patients treated at this hospital for the 5 year period from 1987 to 1991.

1987		1988		1989		1990		1991	
Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient	Out-Patient	In-Patient
32,291	12,729	31,391	10,489	37,115	16,109	39,089	18,817	35,743	15,119

## 2-4-14 Profile of Qunaytra Muhafazat

### (1) Outline

The Muhafazat of Qunaytra, which is also called "Golan Muhafazat," has a population of about 39,000 over a land area of 1,860 sq. km. This muhafazat is the Golan Heights and is now under the control of peace keeping forces of the United Nations. The provincial capital city, Qunaytra, has been demolished, and three quarters of the area of this muhafazat is occupied by Israel. Before the occupation, this muhafazat had a population of about 360,000. Since then, the population has shrunken to 39,000.

	Before Occupation	After Occupation
Land Area	8,000 sq. km	1,600 sq. km
Population	360,000	39,000

Most of the people of this muhafazat have escaped to Dera and Damascus. In Damascus, there is a refugee camp for those who came out of Qunaytra. Therefore, the Health Directorate of Qunaytra Muhafazat is now operating in Damascus, providing those refugees with medical care. Golan Hospital, which had 420 hospital beds and was located in the provincial capital city, Qunaytra, was also demolished during the conflicts. At present, there is no hospital in Qunaytra Muhafazat. However, there is a health center in Baath City, and this center serves as an emergency care center, providing medical services to the local population. To alleviate poor medical care services of this muhafazat, the government is building new hospitals. One of them is a new general hospital with 120 beds, which is located at a site only 100 m away from the above mentioned health center. Another hospital, which is for mothers and children, is also under construction with WHO's assistance. In relation with the construction of these new hospitals, about 40 new doctors are planned to be recruited.

No statistics are available on the medial facilities of Qunaytra Muhafazat.

## (2) State of Ambulance Stationing

Baath Health Center: 5 ambulances

Refugee Camp: 3 ambulances

The Health Directorate of Qunaytra Muhafazat has eight ambulances. Three of them are stationed at the above mentioned refugee camp in Damascus. The other five ambulances are stationed in Qunaytra Muhafazat. These five ambulances are driven by four drivers. These drivers work in a shift to provide 24-hour ambulance service.

Since this muhafazat is a region of conflict, the traffic during the night is tightly controlled by a curfew. As a result, ordinary people do not have means of transportation in emergency during the night. Therefore, ambulances which are stationed at Baath Health Center are the only means of transportation during the curfew for those who are ill, including pregnant women.

## (3) Present State of Emergency Departments

### 1) Baath Emergency Care Center

#### a. Profile

Specialties : general surgery and internal medicine

Number of Beds : nil

As previously mentioned, there are no hospitals in Qunaytra Muhafazat. To meet the demand of medical care, the Ministry of Health has raised the status of Baath Health Center and named it "Baath Emergency Care Center." However, since it was a health center, it can offer only simple examinations and treatments.

The following table accounts for the staff of this center in 1992.

Doctor			Resident			X-ray technician
Medical	Surgical	Others	Medical	Surgical	Others	
8						4

Laboratory technician	Nurse	Clark	Driver	Emergency staff	Others
2	2	-	-	-	-



This center operates 24 hours a day, with a staff consisting of eight doctors, two nurses, four X-ray technicians, and two laboratory technicians. The most prevalent diseases are accidents and poisoning. Injuries from mines or from snakes and scorpions are also common. Patients who are experiencing poisoning are treated only with a procedure of gastrolavage, and then, they are transferred to hospitals in Damascus. Normal deliveries are taken care of at this center. However, if cesarean sections are required, then patients are transferred to Damascus Hospital.

**b. Emergency Department**

According to the record of Baath Emergency Care Center, there are 20 ~ 30 emergency patients a day. 90% of them are treatable at this center, and the rest, 10%, are transferred to hospitals in Damascus.

The following tables are prepared, as a summary, to generally describe the present state of the ambulances and hospitals which are involved on this project. The ambulances operating in all the muhafazats are accounted for quantitatively on their vehicle models and manufactured years and are listed by the muhafazat in a table. Also, each of the 22 national hospitals is described on several specifications in the successive tables.



REGISTERED AMBULANCE (1992年)

△ : used for 15 years or more    ◎ : used for 10 to 15 years    × : unrepairable    ○ : uncertain

	Damascus City	Damascus suburb	Dara	Sweida	Homs	Tartus	Latakia	Hama	Aleppo	Idlib	Derezor	Lakka	Hasaleh	Quneitra	
Dagge	1971△ 11 1973△ 1 1974△ 1	1971△ 4	1968△ 9	1971△ 6	1971△ 3 (3×) ○ 2		1971△ 2		○ 3 ◎ (1×)	1972△ 3 ○ 1 ◎ (1×)	1971△ 3	1971△ 3	1971△ 3		
GMC	1973△ 2								○ 3 ◎ (3×)						
Opel		1979 1													
Larf	1979 1	1982 4	1987 2	○ 2 ◎ (2×)	1986 3 ◎ (2×)	1987 4	1987 6	○ 4 ◎ (4×)	○ 6	1985 2 1987 1	1987 6	1986 3	1987 1◎ (1×) ○6 1986 2◎ (2×)	◎ (2×)	
Forks Wargen	1973△ 2 1974△ 1 1978△ 2 1982 10	1974△ 1980 2	1980 5	1980 3	1978△ 2 1979 1 1982 6	1970△ 1 1982 4 1987 1 ◎ (1×)	1970△ 1 1973△ 1 1978△ 2 1982 1	1982 6 ○ 2 ◎ (2×)	○ 18 ◎ (2×)	1976△ 2 1978△ 2 1980 2 1982 3	1982 4	1974△ 1 1982 6	1975 4 1983 3 1987 2 (1×)		
Shibore	1979 1 1980 1 1982 4 1983 2				1973△ 1					○ 1 ◎ (1×)			1975△ 1 (1×)		
Benz	1973△ 1														
FORD		○ 1 ◎ (1×)							○ 4 ◎ (4×)						
TOYOTA	1979 1				1976△ 1 1979 1						1979 3	○1			
NISSAN		1982 1	1989 2				1985 1								1980 1
Pujo		1978△ 1	1978△ 5		1978△ 2	1978△ 2 1980 1	1978△ 2	1978△ 3 (1×)	○ 2	1978△ 2	1979 2		1975△ 2	○1	
Fiat		1989 1					1991 1				1990 1				
TOTAL	41	20	23	11	22	13	22	15	36	19	14	14	18	8	276
△	21	10	14	6	9	3	8	3	0	9	3	4	10	0	100
◎	17	8	5	3	8	5	6	6	0	5	4	6	4	0	77
×	0	1	0	2	5	1	0	7	10	2	0	0	5	2	35
○	0	0	0	2	2	0	0	6	36	2	0	1	0	7	56

Out line of Facilities

Facility Name	Damascus Hospital	Ibn Al Naffis Hospital	Dumma Hospital	Al Razi Hospital	Ibn Roshid Hospital	Al-Watani Hospital
Mufahazt Name	Damascus City	Damascus City	Damascus Suburb	Allepo	Allepo	Idlib
Established year	1954	1944	1953	1905	1987	1950
Serviced population	16million in Syria	3million in Damascus	1.5 million in Damascus Suburb	2.5 million in Allepo	2.5 million in Allepo	0.84 million in Idlib
Beds Number	558	170	160	180	144	103
Doctors Number	103	47	28	52	24	23
Resident doctor Number	375	44	39	29	65	56
Nurse Number	400	97	56	145	64	89
Pra Medics Number	144	60	65	15	27	20
Ambulance crew Number	34	1	-	24	7	12
Out Patients Number	100,774 (1991)	69,393 (1991)	34,222 (1991)	48,279 (1991)	35,954 (1991)	24,914 (1991)
In Patients Number	45,646 (1991)	655 (1991)	2,543 (1991)	3,682 (1991)	3,128 (1991)	11,330 (1991)
Specialities	1.Surgery (General,Orthopedic,Plastic, Neuro,Chest,Urology,Ear, Nose,Throat,Ophthalmic) 2.Pediatrics 3.Radiology 4.Anesthetic 5.Other	1.Internal Medicine 2.Obstetric 3.Gynecology 4.Pediatrics 5.Radiology 6.Anesthetic	1.General Surgery 2.Urology Surgery 3.Orthopedic Surgery 4.Internal Medicine 5.Anesthetic 6.Pediatrics 10.Ophthalmic 7.Obstetric 11. Emergency 8.Radiology 9.Ear, and Nose	1.General Surgery 2.Orthopedic Surgery 3.Plastic Surgery 4.Obstetric 5.Gynecology 6.Radiology 7.Emergency 8.Internal Medicine	1.Internal Medicine 2.Pediatrics 3.Gastro-Intestinal 4.Cardiovascular 5.Emergency	1.General Surgery 2.Plastic Surgery 3.Urology Surgery 4.Ear,Nose,Throat 5.Ophthalmic 6.Gynecology 7.Radiology 8.Emergency
Main Diseases	1.Hepatitis 2.Heart Disease 3.Trauma 4.Infectious Disease 5.Diarrhea 6.Anemia 7.Meningitis 8.Toxicosis 9.Pneumonia 10.Hepatitis	1.Heart Disease 2.Pneumonia 3.Trauma 4.Meningitis 5.Diabetes 6.Asteriasclerosis 7.Rheumatism 8.Tuberculosis 9.Anemia	1.Trauma 6.Bronchitis 2.Hernia 3.Heart Disease 4.Diabetes 5.Cesarian	1.Burn injury 2.Hernia 3.Appendicitis 4.Trauma 5.Fracture 6.Acute Abdomen 7.Ulcer 8.Tumor	1.Circulatory Disease 2.Tuberculosis 3.Diabetes 4.Heart Disease 5.Ischemic Heart Disease 6.Peptic Ulcer	1.Heart Disease 2.Diabetes 3.Trauma 4.Anemia 5.Pneumonia 6.Arteriasclerosis 7.Ulcer 8.Tuberculosis 9.Meningitis
Facility condition	Largest and best-equipped and top referral hospital under the Ministry of Health. Patients come throughout the country. Emergency department is now in operation after having been renovated recently.	Ophthalmology hospital and nephrology hospital are located on a same hospital complex. At Present (in Sep, 1992), emergency department is renovating and complete in the beginning of 1993.	Largest hospital in Damascus Suburb. Patients who are not treatable here are sent to Damascus. At present (in sep, 1992), emergency department is renovating and complete in the beginning of 1993.	Hospital is in charge of emergency care activities for Aleppo Muhafazat. Renovation of Emergency department has been completed, and now operating. There are X-ray room, O.P. room, and ICU.	As Al Razi Hospital deal in surgery, Ibn Roshid Hospital deal in internal medicine. Hospital has an arrangement that allows mobilization of ambulances, when needed, from Al Razi Hospital.	Mainly performs surgeries. If internal medicine is concerned, then patients are referred to Ibn Sina hospital, which is located on the same block. At present, Emergency department is under renovation.
Major Medical Equipments	1.ICU Equipment Ventilator,Defibrilator, ECG Monitor,Blood gas Analyzer,Electrolyte Analyzer 2.Operation Room Equipment Anesthesia Machine, O.P.Table,Shadowless Lamp, Electric Knife, Aspirator,ets	1.ICU Equipment ECG ,Defibrilator,Aspirator 2.Other Sterilizer, Ultrasonic Apparatus Anesthesia Machine,Aspirator Ventilator,ElectricKnife, Shadowless Lamp	1.ICU Equipment ECG, Defibrilator, Aspirator Ventilator 2.Other Sterilizer, Xray Apparatus Ultrasonic Apparatus Anesthesia Machine, O.P.Table,Shadowless Lamp,	1.ICU Equipment ECG, Defibrilator, ECG Monitor, Ventilator 2.Other Xray Apparatus, Anesthesia Machine,ElectricKnife, Shadowless Lamp,Sterilizer, Ventilator,O.P.Table	1.ICU Equipment ECG, Defibrilator, ECG Monitor, Ventilator 2.Other Xray Apparatus, Anesthesia Machine,ElectricKnife, Shadowless Lamp,Sterilizer, Ventilator,O.P.Table	1.ICU Equipment Defibrilator, ECG,ECG Monitor,Ventilator, Aspirator 2.Other Xray Apparatus, Anesthesia Machine, O.P.Table,Funds Camera,Shadowless Lamp

Out line of Facilities

Facility Name	Ibn Sina Hospital	Al Watani Hospital	Jableh Hospital	Al Watani Hospital	Al Watani Hospital	Tadmorl Hospital
Mufahazt Name	Idlib	Latakia	Latakia	Tartus	Homs	Homs
Established year	1984	1945	1975	-	1949	-
Serviced population	0.84 million in Idlib	60 thouthands in Latakia	0.19 million in Latakia south	0.62 million in Tartus	1.17 million in Homs	0.45 million in palmira
Beds Number	103	433	124	156	314	39
Doctors Number	21	69	24	69	80	15
Resident doctor Number	14	50	12	74	43	3
Nurse Number	122	405	202	291	263	36
Pra Medics Number	17	42	24	62	123	21
Ambulance crew Number	13	-	4	-	28	5
Out Patients Number	21,255 (1991)	34,248 (1991)	13,901 (1991)	42,836 (1991)	91,272 (1991)	11,264 (1991)
In Patients Number	13,012 (1991)	24,248 (1991)	4,100 (1991)	8,482 (1991)	16,865 (1991)	1,717 (1991)
Specialities	1.Cardiac Internal 2.Nursery 3.Dialysic 4.Neurology 5.Internal Medicine 6.Psychatherapy 7.Radiology 8.Thyroid	1.General Surgery,Plastic Surgery,Urology Surgery,Orthopedic Surgery 2.Internal Medicine 3.E.N.T. 4.Ophthalmology 5.Gynecology and Obstetric 6.Radiology 7.Emergency	1.General Surgery 2.Intenal Medicine 3.Gynecology and Obstetric 4.Radiology 5.Emergency	1.Abdominal Surgery 2.Plastic Surgery 3.Urology 4.Neurology 5.Gynecology and Obstetric 6.Ophthalmology 7.E.N.T. 8.Pediatrics 9.Internal Medicine	1.General Surgery 2.Orthopedic Surgery 3.Internal Medicine 4.Heart Surgery 5.E.N.T. 6.Ophthalmology 7.Urology 8.Radiology 9.Emergency	1.Surgery 2.Internal Medicine 3.Gynecology and Obstetric 4.Ophthalmology 5.E.N.T. 6.Radiology 7.Physical Therapy 8.Emergency
Main Deseases	1.Circuratory Disease 2.Tuberculosis 3.Diabeticies 4.Heart Disease 5.Ischemic Heart Disease 6.Ulcer	1.Trauma 2.Circuratory Disease 3.Heart Disease 4.Ulcer 5.Repiratory Disease	1.Heart Disease 2.Circulatory Disease 3.Ulcer 4.Respirato	1.Accident,Toxicosic 2.Perinatal Disease 3.Gastro -intestinal Disease 4.Respiratory Disease 5.Hypertension	1.Accident,Toxicosic 2.Gastro -intestinal Disease 3.Respiratory Disease 4.Perinatal Disease 5.Hypertension 6.Heart Disease	1.Accident,Toxicosic 2.Circulatory Disease 3.Respiratory Disease 4.Perinatal Disease 5.Hypertension 6.Heart Disease
Facility condition	Hospital mainly deals in internal medicine. It has a plan to renovate its emergency department,but not started,yet. Present emergency department has ICU, laboratory,and consulting rooms.	It deals in surgery, internal medicine,etc. as a general hospital. Hospital places a high priority on the maintenance, so maintenance section has a tools necessary for work.	Hospital refers Seriously ill patients to Al Watani Hospital in Latakia city. Ambulances necessary for patient transportation are also managed by Al Watani Hospital.	General hospital,but capacity is small to meet the demand of medical services.To solve this, New hospital,(450 beds) has been constructed and Medical equipment is procured through from Arab neighbors funds.	Base hospital in Homs,the largest muhafazat of the Syrian Arab RePublic. Patients are sometimes received from Lebanon, new hospital is under construction near border.	Besides proves medical care to the local inhabitants,hospital serves as a relay station for the patient transportation from Hasakeh and Deirezzor to Damascus, and vice versa, because of its location.
Major Medical Equipments	1.ICU Equipment ECG,Defibrilator,Aspirator,C entral Ecg Monitoring Apparatus,ECG Monitor, Ventilator,Dry Oven 2.Other Dialysis Apparatus,Distilled water Apparatus	1.ICU Equipment ECG Monitor,ECG, Defibrilator 2.Other Xray Apparatus, Sterilizer, Anesthesia Machine, Ventilator,Electric Knife, Shadowless Lamp,	1.ICU Equipment ECG, Defibrilator, ECG Monitor, Aspirator 2.Other Xray Apparatus, Sterilizer, Anesthesia Machine,Electric Knife,Shadowless Lamp, O.P.Table	1.ICUEquipment ECG,Defibrilator,ECG monitor,Aspirator,Ventilator 2.Other Xray Apparatus,Sterilizer, Shadowless Lamp,Anesthetic MachineEndoscope,Ophthal mology Microscope	1.ICU Equipment ECG,DEfibrilator,ECG Monitor,Aspirator,Ventilator, 2.Other Dialysis Apparatus, Xray Apparatus Sterilizer, O.P.Table,Shadowless Lamp, Anesthesia Machine	1.ICUEquipment ECG, DEfibrilator, Aspirator,Ventilator 2.Other Xray Apparatus,Sterilizer, O.P.Table,Shadowless Lamp, Anesthesia Machine

Out line of Facilities

Facility Name	Al Watani Hospital	Salamieh Hospital	Al Watani Hospital	Kameshli Hospital	Al Watani Hospital	Al Furrat Hospital
Mufahazt Name	Hama	Hama	Hasakeh	Hasakeh	Der-ez-zor	Der-ez-zor
Established year	1975	1984	1975	1979	1930	1932
Serviced population	1.01 million in Hama	0.25 million in Salamieh Area	0.93 million in Hasakeh	0.37 million in Kameshli Area	0.55 million in Der-ez-zor	0.55 million in Der-ez-zor
Beds Number	286	154	200	68	124	83
Doctors Number	123	24	26	22	32	20
Resident doctor Number	84	17	21	9	21	7
Nurse Number	182	53	84	40	127	80
Pra Medics Number	60	15	22	33	33	32
Ambulance crew Number	15	2	8	8	-	-
Out Patients Number	55,818 (1991)	25,421 (1991)	29,772 (1991)	36,885 (1991)	29,857 (1991)	9,611 (1991)
In Patients Number	22,464 (1991)	8,171 (1991)	12,181 (1991)	5,622 (1991)	4,038 (1991)	7,055 (1991)
Specialities	1.General Surgery 2.Neuro surgery 3.Orthpedic Surgery 4.Heart Surgery 5.Gynecology and Obstetric 6.Ophthalmology 7.E.N.T. 8.Radiology 9.Emergency	1.General Surgery 2.Internal Medicine 3.Gynecology and Obstetric 4.E.N.T. 5.Radiology 6.Emergency	1.General Surgery 2.Neuro Surgery 3.Orthopedic Surgery 4.Gynecology and Obstetric 5.Ophthalmology 6.E.N.T. 7.Radiology 8.Emergency	1.General Surgery 2.Gynecology and Obstetric 3.Ophthalmology 4.E.N.T. 5.Plastic Surgery 6.Urinal surgery 7.Dialysic 8.Emergency	1.General Surgery 2.Gynecology and Obstetric 3.Ophthalmology 4.E.N.T. 5.Plastic Surgery 6.Urinal surgery 7.Dialysic 8.Emergency	1.General Surgery 2.Gunecology and Obstetric 3.Ophthalmology 4.E.N.T.
Main Descases	1.Accident, Toxicosic 2.Heart Disease 3.Trauma 4.Circulatory Disease 5.Respiratory Disease	1.Accident, Toxicosic 2.Perinatal Disease 3.Trauma 4.Circulatory Disease 5.Respiratory Disease	1.Accident, Toxicosic 2.Peptic Disease 3.Respiratory Disease 4.Urinal Disease 5.Infectional Disease 6.Circulatory Disease 7.Perinatal Disease	1.Accident, Toxicosic 2.Peptic Disease 3.Respiratory Disease 4.Infectional Disease 5.Urinal Disease 6.Circulatory Disease 7.Perinatal Disease	1.Trauma 2.Respiratory Disease 3.Hernia 4.Diarrhea 5.Meningitis 6.Perinatal Disease	1.Heart Disease 2.Infectional Disease 3.Respiratory Disease 4.Diabetes 5.Arteriasclenasis 6.Emergency
Facility condition	Base hospital of Hama Muhafazat. This hospital is performing cerebral surgeries. However, patients who are not treatable here are sent to Damascus.	This hospital provides medical services to 250,000 inhabitants living in the Salameih city and its suburbs. However, patients are often referred to Al Watani Hospital.	Base hospital of Hasakeh Muhafazat. The current demand of medical services is huge. To solve this, three new hospitals are under construction, each in Kameshli, Malekiah, Lasain.	Hospital is located close to the borderline with Turkey, and controls health centers which are scattered within a radius of 50km from the hospital. Hospital sometimes has to reffer patients to other hospital	This hospital had specialized in obstetrics and gynecology before, but now it mainly deals in surgery because Al Furaat Hospital specializes in internal medicine.	Mostly specializes in internal medicine. Hospital has recently renovated its emergency department, and now receiving patients.
Major Medical Equipments	1.ICU Equipment ECG,Defibrilator, ECG Monitor, 2.Other Xray Apparatus,Anesthesia Machine,Aspirator,Endoscop e,Shadowless Lamp, O.P.Table,O.P.Microscope	1.ICU Equipment ECG,Defibrilator,Aspirator 2.Other Xray Apparatus,Anesthesia Machine,Aspirator,Shadowle ss Lamp,O.P.Table,Ventilator	1.ICU Equipment ECG,Defibrilator, ECG Monitor, 2.Other Dialysis Apparatus,Xray Apparatus,Anesthesia Machine,Aspirator,Shadowle ss Lamp,O.P.Table,Ventilator	1.ICU Equipment ECG,Defibrilator, ECG Monitor, 2.Other Dialysis Apparatus,Xray Apparatus,Anesthesia Machine,Aspirator,Shadowle ss Lamp,O.P.Table,Ventilator	1.ICU Equipment ECG,Defibrilator, ECG Monitor, 2.Other Dialysis Apparatus,Xray Apparatus,Anesthesia Machine,Aspirator,Shadowle ss Lamp,O.P.Table,Ventilator	1.ICU Equipment ECG,Defibrilator,ECG Monitor,Central ECG Monitoring Apparatus 2.Other Xray Apparatus,Anesthesia Machine,Aspirator,Shadowle ss Lamp,O.P.Table,Ventilator

Out line of Facilities

Facility Name	Al Watani Hospital	Al Watani Hospital	Al Watani Hospital	Baath Health Center
Mufahazt Name	Raqqah	Dara	Sweida	Quneytra
Established year	1977	1946	1967	1956
Serviced population	0.48 million in Raqqah	0.54 million in Dara	0.27 million in Sweida	40 thouthands in Quneytra
Beds Number	232	256	444	0
Doctors Number	45	55	26	8
Resident doctor Number	19	32	19	0
Nurse Number	150	232	363	2
Pra Medics Number	27	46	34	6
Ambulance crew Number	45	-	15	-
Out Patients Number	38,796 (1991)	59,919 (1991)	35,743 (1991)	20~30 persons/day
In Patients Number	16,597 (1991)	43,848 (1991)	15,119 (1991)	-
Specialities	1.General Surgery 2.Plastic Surgery 3.Urinal Surgery 4.Ophthalmology 5.E.N.T. 6.Internal Medicine 7.Pediatrics 10.Emergency 8.Dermatology 9.Dialysic	1.General Surgery 2.Internal Medicine 3.Pediatrics 4.Gynecology and Obstetric 5.Plastic Suegery 6.Ophthalmology 7.Urology 8.E.N.T. 9.Emergency 10.Radiology	1.General Surgery 2.Urinal Surgery 3.Plastic Surgery 4.Internal Medicine 5.E.N.T. 6.Pediatrics	No Data available
Main Deseases	1.Heart Disease 2.Trauma 3.Kidney Disease 4.Diabates 5.Appendicitics 6.Ulcer	1.Diarrhea 2.Respiratory Disease 3.Peptic Disease 4.Heart Disease 5.Trauma 6.Diabates 7.Circulatory Disease	1.Accident, Toxicosic 2.Myocardial Infraction 3.Hypertention 4.Diabates 5.Trauma 6.Perinatal Dusease	1. Accident, Toxicosic 2. Injury by Mine 3. Bite Injury by snake, scorpion 4. Perinatal Disease
Facility condition	Established as an obstetrics and gynecology hospital. then, expanded to a general hospital. Emergency department has no ICU room. The renovation plan has not started, yet.	The only national hospital of Dera Muhafazat. The renovation completed in December, 1992. Since Dera is close to Damascus, patients are often transferred to Damascus.	The only national hospital of Sweida Muhafazat. It has completed the renovation of its emergency department in December 1992, Hospital has ICU room for other departments.	Golan Hospitl has been demolished. Baath health center promotes an emergency care center. Health center has consulting rooms and a sipmple operation room, but no ICU's.
Major Medical Equipments	1.ICU Equipment ECG, Defibrilator, ECG Monitor 2.Other Xray apparatus, Dialysis Apparatus, Anasthetic Machine, O.P. Table, Shadowless Lamp	1.ICU Equipment ECG, Defibrilator, ECG Monitor 2.Other Xray apparatus, Dialysis Apparatus, Anasthetic Machine, O.P. Table, Shadowless Lamp	1.ICU Equipment ECG, Defibrilator, aspirator 2.Other Xray apparatus, Dialysis Apparatus, Anasthetic Machine, Shadowless Lamp, O.P. Table, Electronic Knife	1. Operation Room Anasthetic Machine, Shadowless Lamp, O.P. Table





## **Chapter 3 Outline of the Project**



## **Chapter 3 Outline of the Project**

### **3-1 Objectives**

This project is to improve the emergency services of the Syrian Arab Republic, not only by renewing the fleets of ambulances under the control of the Ministry of Health, but also by introducing ICU equipment to the emergency departments of all the base hospitals under the Ministry of Health as well as CT scanners to some of these emergency departments. Objectives of this project are:

1. to improve the medical services provided annually to a total of one million patients in need of emergency care, through improvements made in the emergency services at all the base hospitals of the Ministry of Health;
2. to rectify regional differences which exist in the health and medical services of the Syrian Arab Republic, by strengthening the emergency departments of 22 base hospitals around the country;
3. to improve diagnostic services of the emergency care system by installing CT scanners at four base hospitals;
4. to secure safe and comfortable patient-transportation and to reduce the cost of vehicle maintenance, by renewing those vehicles that are beyond their expected lifetimes; and
5. to establish a nationwide referral system by procuring telecommunications instruments. This procurement is to improve the emergency care system at base hospital level, and this referral system will facilitate the provision of more effective diagnostic means and treatments to patients promptly from sites of accident to appropriate medical facilities.

### **3-2 Study and Examination of the Request**

#### **3-2-1 Examination of Propriety and Necessity of the Project**

Emergency care system has been established in the Syrian Arab Republic. However, this system does not function sufficiently since not only emergency departments of hospitals are poorly equipped, but also the medical equipment installed at

these departments is quite old. Since patients with severe conditions are not treatable at these emergency departments, these patients have to be transferred to Damascus Hospital in Damascus, the nation's capital city. Thus, the people of the Syrian Arab Republic do not get much benefit from the existing emergency care system. In addition, ambulances are also not prepared to support the emergency care system. The vehicles are not easily maintainable because most vehicles are more than ten years old. This present state of the emergency care system is an indirect result of the circumstances that substantial part of the national budget has been allocated for the nation's defense and that there has been a shortage of hard currencies caused by economic recessions. Little funds has been available for the field of health and medical care. Therefore, the existing medical equipment has been maintained with all efforts available, and no renewal of the equipment has been carried out.

In accordance with current changes in the world affairs, the Government of the Syrian Arab Republic has been adopting open policies toward Western countries. In relation with these policies, a national development program has been conceived to improve the existing state of medial services in the field of health and medical care. In this development program, there are a hospital construction project, a hospital improvement project, an expansion project of health centers and health posts, etc. The Project for the Upgrading of Emergency Services is one of these projects.

Renovation work on the emergency departments of the national hospitals which is located in all the muhafazats under the control of the Ministry of Health is currently being carried out on the Project for Improving the Emergency Care System. The emergency department of each hospital is to acquire rooms for surgery, internal medicine, cardiosurgery and pediatrics, as well as an examination room and an X-ray room in accordance with its functional level. Medical staff is also assigned to each of these emergency departments and is ready for providing emergency care. However, the problem is that a shortage of medical equipment is impeding the improvement which has been planned to meet the demands of local residents for emergency care at each of these hospitals. Thus, procurement of ICU equipment for base hospitals, CT scanners for referral hospitals and ambulances for 14 muhafazats in order to replace existing superannuated vehicles not only help establish the foundation of the nationwide emergency care system but also expand the nation's emergency services, which include emergency services at local hospitals, emergency care systems at provincial level, a referral system for higher degrees of medical services, etc. This project is implemented as an important part of the Project for Improving the Emergency Care System, which is executed by the Ministry of Health of the Syrian Arab Republic. This project surely

benefits the people of the Syrian Arab Republic with many expected effects and improvements in their welfare. Therefore, it is highly appropriate and necessary to implement this project.

### **3-2-2 Relations with Other Similar Projects**

#### **(1) Medical Facility Improvement Project**

The Medical Facility Improvement Project is to improve dilapidating medical facilities and to expand their emergency departments. All the hospitals are involved in this Medical Facility Improvement Project. However, the progress of this project at each medical facility is different from one another. Some facilities are still at the planning stage while others are at the construction stage. The medical facilities involved in this project are also receiving construction work on the Medical Facility Improvement Project. Therefore, the implementation schedule of this project should be planned in relation with the progress of the construction work carried out at these medical facilities.

#### **(2) Project for Procuring Medical Equipment for the Six New Hospitals**

The Government of the Syrian Arab Republic is currently building 28 hospitals with 100 ~ 400 beds throughout the country to improve the nation's medical facilities. This project is called the Project for Constructing 28 Hospitals. For six provincial hospitals among these 28 hospitals, the construction work of which is completed or nearly completed, the government is planning to procure medical equipment with funds provided by Kuwait. The emergency departments of these six hospitals are also to serve the respective populations living in their vicinities. This Project for Procuring Medical Equipment for the Six Hospitals is going to provide, among other things, CT scanners to four of these hospitals as well as an MRI apparatus to one of them. This medical facility to receive an MRI is to be a research center for cardiovascular diseases. These hospitals are not involved in this Project and will serve the populations living in different areas from those covered by the hospitals which are improved on this Project.

The following diagram shows the interrelations of this project with other projects involved in the Project for Improving the Emergency Care System, which is executed by the Ministry of Health.

The Medical Facility Improvement Project is to improve medical facilities around the country, and the Project for Procuring Medical Equipment for the Six Hospitals is also to improve the emergency care provided in the localities of the six hospitals. These projects and this Project are complementary to one another for establishing an effective

nationwide system for providing emergency care. Thus, the implementation of this Project is surely to improve the nationwide emergency care system of the Syrian Arab Republic.

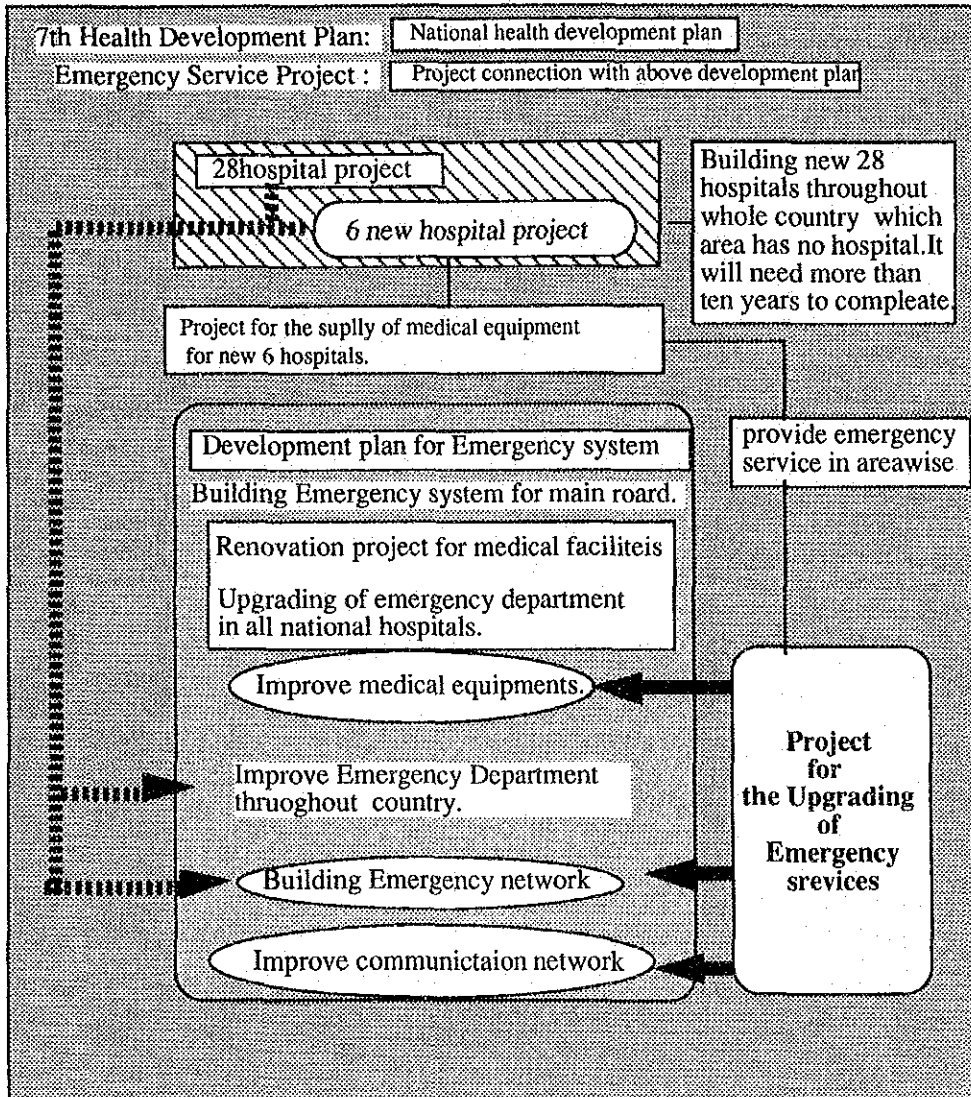


Figure 3-1