

Republic of Iraq

Ministry of Planning and Development Cooperation
Central Organization for Statistics & Information
Technology

Kurdistan Region Statistic
Office

Ministry of Health

Environmental Statistics Directorate



ENVIRONMENTAL SURVEY OF MEDICAL SERVICES ACTIVITIES IN IRAQ IN 2008



Republic of Iraq

Ministry of Planning and Development Cooperation
Central Organization for Statistics & Information
Technology

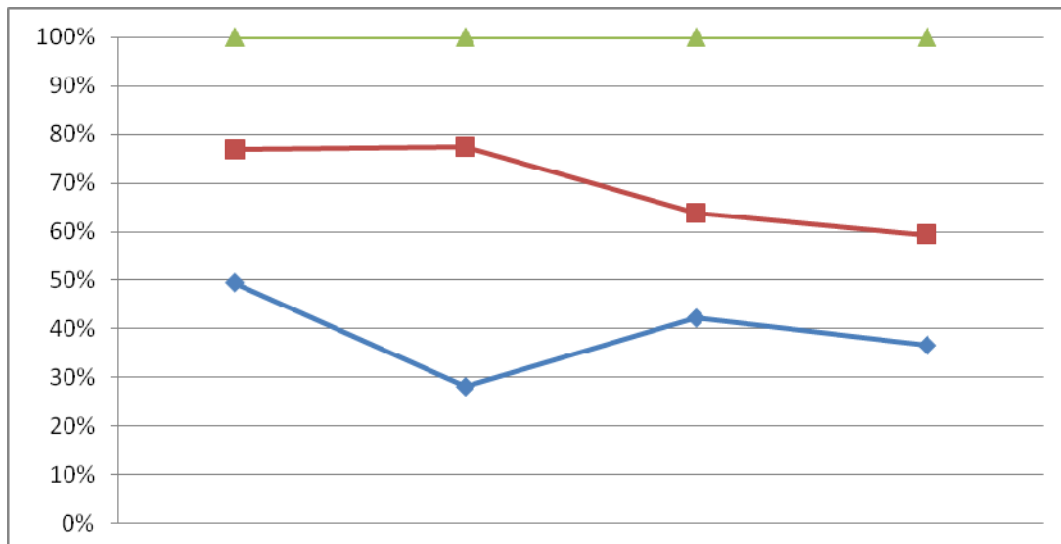
Kurdistan Region Statistic
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ENVIRONMENTAL SURVEY OF MEDICAL SERVICES ACTIVITIES IN IRAQ IN 2008



March, 2009

**World Health
Organization**



**Kurdistan Region Statistic
Office**



**Central Organization for Statistics
and Information Technology**



Allied and Participant Organizations Supportive of Environmental Survey of Medical Services Activities in Iraq in 2008

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Environmental Survey of Medical Services Activities in Iraq in 2008

1- Preface

1.1 Introduction

Medical services sector provides citizens with health care through the services it offers in fields of examination, treatment and surgery. While this sector endeavors to protect citizen's health and prevent spread of disease, it might be a cause of effecting health and environmental hazards. This could happen if proper and safe methods are not applied in handling waste which is generated in the course of carrying out day-to-day work, and also, if such waste is not disposed of in an appropriate manner whether inside or outside health facilities. In particular, hazardous waste, containing pathological and infectious, agents and chemical and radioactive wastes may pose health hazards to patients and workers inside those facilities, and to the community and environment if such wastes are mixed with the rest of health facility waste and disposed of to the external environment without carrying out the necessary treatment.

Hence, it has become essential to identify the amounts of waste generated and the methods applied in its collection, segregation, transportation and disposal. It is essential, as well, to identify the amounts of water consumed and wastewater generated, including treatment used to dispose of the latter, methods of dealing with gaseous pollutants resulting from waste incineration, workers in this field and the level of environmental awareness they have. All of that can be achieved through conducting an extended survey that includes health facilities. This survey is considered the first of its kind in Iraq.

1.2 Survey objectives

This survey aims to provide a database on all aspects relevant to the actual picture of health facilities environment through the following indicators:

- 1- Number of health facilities by types, number of wards and operating theatres,
- 2- Number of inpatients, outpatients, days of inpatient care and bed occupancy rate,
- 3- Number, amounts and types of commodities requirements used and consumed at health facilities,
- 4- Volume of consumed water and generated wastewater and wastewater disposal methods,
- 5- Amount of waste generated (hazardous or ordinary), disposal methods, waste collection and transportation and regulations implemented in waste management,

Environmental Survey of Medical Services Activities in Iraq in 2008

6- Number of working cadres and the level of their educational qualification and environmental awareness,

7- Amounts and costs of fuel and power consumed at health facilities and costs of waste treatment.

1.3 Anticipated results and benefits from the survey

1- Assessment of Governorates population needs for either new health facilities, or just expansion and development of existing ones, depending on results and statistics of bed occupancy rate and number of patients,

2- Identification of the actual need for the most commonly used material and medical requirements,

3- Identification of the need for waste incinerators and sterilization equipment for reusable medical instruments, or any other modern equipment that need be imported for waste treatment, or prevention of environmental pollution,

4- Identification of volume and sources of water used in health facilities, and methods of disposal of wastewater. This is required to determine the actual need for safe water, and endeavor to make filtration and treatment units available, should the necessity arise,

5- Provision of data on amounts of ordinary and hazardous waste, its collection and transportation requirements and treatment method used. This is meant to help develop waste management systems and provide high tech treatments,

6- Identifying number of cadres working in this field and the level of personal protection, environmental awareness and education they have. This is intended to work on promoting worker's efficiency and protecting him from occupational hazards,

7- Determination of the actual need of energy required for health facilities in order to provide quality services.

In light of the above, this survey provides an opportunity for decision makers from environmental and health entities to evaluate health facilities, work on upgrading its environmental condition, lay down new regulations pertinent to waste management, prepare programs aimed at raising the awareness of workers involved in those facilities and lay down, or upgrade guidelines and legislations and anything else that aims at the provision of quality services for patients and prevention of hazards to both of human health and environment that could result from these activities.

Environmental Survey of Medical Services Activities in Iraq in 2008

1.4 Problems and challenges

Execution of survey had been through problems and challenges basically attributed to modernity of survey, unavailability of forms or lack of a past primary comprehensive database on such type of specialized surveys.

The following is a summary of the most important problems and challenges:

1- Gross deficit, at health facilities administration, in data documentation and formal records of types of waste and amounts of generated and incinerated waste,

2- Because of unavailability of water bills at most health facilities, estimation of water consumption was based on the number of water storage tanks in those facilities and the frequency of filling in tanks per day,

3- Difficulty in obtaining the required data because of routine procedures at some health facilities; a factor that delayed receiving survey forms,

4- Difficulty in obtaining precise technical information on incinerators specifications due to lack of necessary expertise among the majority of workers in hospitals, especially those in charge of incinerators,

5- Deficiency of required experience of employees of Environmental Statistics Directorate. In addition, there was a need for information about survey experience of other countries which have experience in this field. This problem was the major challenge encountered by the directorate in auditing the logicity of data.

2- Research methodology and survey execution

2.1 Level of representation

The survey included all State and private hospitals, central health laboratories, chest disease clinics, specialized dental centers, allergic diseases and asthma centers, specialized health centers, forensic medicine and blood banks. In addition, it included general health centers (main centers only). The survey was conducted at the level of all Governorates of Iraq, including Governorates of Kurdistan Region.

The following table shows the number of health facilities included in the survey in 2008:

Environmental Survey of Medical Services Activities in Iraq in 2008

The number of health facilities by type and Governorate: 2008

| Governorate | State hospital | Private hospital | Central health labs | General Health Center (major) | Chest disease clinic | Special. dental center | Allergic disease /asthma center | Special. Health center | Forensic Medicine | Blood Bank | Total |
|---|----------------|------------------|---------------------|-------------------------------|----------------------|------------------------|---------------------------------|------------------------|-------------------|------------|------------|
| Ninawa | 14 | 3 | 1 | 43 | 1 | 2 | 0 | 1 | 1 | 1 | 67 |
| Karkook | 6 | 2 | 1 | 29 | 1 | 1 | 1 | 0 | 1 | 1 | 43 |
| Diala | 9 | 3 | 1 | 11 | 1 | 1 | 0 | 0 | 1 | 1 | 28 |
| Anbar | 12 | 1 | 1 | 19 | 1 | 1 | 0 | 0 | 1 | 1 | 37 |
| Baghdad | 39 | 35 | 2 | 108 | 1 | 13 | 1 | 14 | 1 | 2 | 216 |
| Babel | 8 | 3 | 1 | 29 | 1 | 1 | 1 | 0 | 1 | 1 | 46 |
| Karbala | 5 | 2 | 1 | 18 | 1 | 1 | 0 | 0 | 1 | 1 | 30 |
| Waset | 9 | 1 | 1 | 17 | 1 | 1 | 0 | 0 | 1 | 1 | 32 |
| Saladin | 9 | 1 | 1 | 14 | 1 | 1 | 0 | 0 | 1 | 1 | 29 |
| Najaf | 6 | 3 | 1 | 17 | 1 | 1 | 0 | 0 | 1 | 1 | 31 |
| Al Qadeseya | 5 | 2 | 1 | 24 | 1 | 1 | 0 | 0 | 1 | 1 | 36 |
| Al Muthanna | 4 | 1 | 1 | 15 | 1 | 1 | 1 | 0 | 1 | 1 | 26 |
| Thee Qar | 8 | 1 | 1 | 25 | 1 | 2 | 0 | 0 | 1 | 1 | 40 |
| Misan | 6 | 0 | 1 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 33 |
| Basra | 12 | 5 | 1 | 41 | 1 | 1 | 1 | 0 | 1 | 1 | 64 |
| Sulimaneya | 21 | 7 | 2 | 43 | 1 | 1 | 1 | 8 | 1 | 1 | 86 |
| Erbil | 17 | 6 | 1 | 26 | 1 | 1 | 0 | 4 | 0 | 0 | 56 |
| Dhook | 7 | 4 | 1 | 23 | 0 | 0 | 0 | 9 | 1 | 1 | 46 |
| Total | 197 | 80 | 20 | 523 | 17 | 31 | 6 | 37 | 17 | 18 | 946 |
| New, non functioning & under rehab. centers | 6 | 6 | 0 | 20 | 1 | 3 | 0 | 37 | 0 | 0 | 43 |
| Grand Total | 203 | 86 | 20 | 543 | 18 | 34 | 6 | 44 | 17 | 18 | 989 |

2.2 Questionnaire form

Due to the modernity of this type of survey in the Central Organization for Statistics and Information Technology, the survey questionnaire attained great importance. It was prepared in light of questionnaires of medical environmental surveys which were executed in some countries. The questionnaire was presented to a number of national and international experts and entities to enrich it with their opinions and knowledge. Of those entities are:

Environmental Survey of Medical Services Activities in Iraq in 2008

- 1- Ministry of Environment.
- 2- Ministry of Health (MOH).
- 3- United Nations International Children Fund (UNICEF).
- 4- World Health Organization (WHO).
- 5- Environmental Statistics Directorate / Jordan.
- 6- National Accounts Directorate / Central Organization for Statistics.
- 7- Social Statistics Directorate / Central Organization for Statistics.

Moreover, a local environmental expert was contracted to prepare the final draft of the form, examine data logic, analyze statistical data and participate in the preparation of the final report.

The survey form included the following sections:

- 1- Definition data.
- 2- General data.
- 3- Commodities requirements in use.
- 4- Hazardous chemicals in use.
- 5- Expired chemicals and medications.
- 6- Expired hazardous chemicals (radioactive and genotoxic).
- 7- Fixed assets used for environmental protection.
- 8- Data on water.
- 9- Data on waste.
- 10- International system of waste classification.
- 11- Information on incineration.
- 12- Waste treatment costs.
- 13- Amount and cost of consumed power.

Environmental Survey of Medical Services Activities in Iraq in 2008

2.3 Time schedule of Environmental survey of medical services in Iraq in 2008

| Activity | Period |
|---|-----------------------|
| 1- Stage of preparation and arrangements | |
| Committees formation | 15-25 Feb., 2008 |
| Designing the questionnaire and preparation of statistical frames | 1-10 March., 2008 |
| Preparation of output tables | 11-20 March, 2008 |
| Discussion on the questionnaire with the experts | 7 April- 11 May, 2008 |
| Conduction of pre-testing and experimental survey | 13 May, 2008 |
| Approval of the final form of the questionnaire | 12 June, 2008 |
| Preparation of guidelines for filling in the questionnaire, auditing and Coding | 12 June, 2008 |
| Setting computer programs for entries, output tables and reports | 15/7/2008-15/7/2008 |
| Identification and preparation of work requirements for courses and work field (printing, requirements, transportation) and handing to Governorates | 31/8/2008-4/9/2008 |
| Training courses | |
| First training course: central and local supervisors and field researchers | 15-17/9/2008 |
| Second training course: Auditors and coders | 18/9/2008 |
| Third training course: Data entry employees | 18/9/2008 |
| Frame upgrading in the field | 5/10-6/11/2008 |
| Field work | |
| 3- Stage of clerical work | |
| Auditing and coding | 9/11-15/12/2008 |
| 4- Stage of automated entry and processing | |
| Entry of questionnaires into computer | 16-23/12/2008 |
| Examination of final results | 4-29/1/2009 |
| 5- Stage of preparation and issuing of reports | |
| Stage of preparation of primary report | 1-12/2/2009 |
| Modification of primary report | 15/2/2009 |
| Preparation of final report | 16/2/2009 |
| Issuance of final report | 31/3/2009 |

Environmental Survey of Medical Services Activities in Iraq in 2008

2.4 Training

Training process of technical cadres attained great importance. It was not limited to technical cadres only, but included, as well, committee members, central supervisors, clerical auditors and data processors. In addition, a team of two field researchers participated in the field work: One researcher is employed at the Central Organization for Statistics and Information Technology; the other researcher is an employee of the MOH in Baghdad and Governorates.

The following table details the number of trainees:

| Trainees | Number |
|--------------------------------|--------|
| Members of technical committee | 12 |
| Central supervisors | 9 |
| Local supervisors | 18 |
| Field researchers | 50 |
| Clerical auditors | 12 |
| Program analysts | 2 |
| Data entry programmers | 9 |
| Auxiliary | 9 |
| Total | 121 |

2.5 Steps of work execution

- * Formulation of a primary plan comprising detailed objective, time schedules, work mechanism, statistical forms, guidelines and bases of auditing,
- * Training of cadres,
- * Preparation of requirements,
- * Fieldwork execution,
- * Clerical work,
- * Entry of questionnaires into the computer,
- * Preparation of reports.

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2.6 Field work

A detailed plan was accomplished to carry out field work. It is briefed as follows:

1- Central supervisors (9 members) were assigned to Governorates: each supervisor was assigned to three Governorates except for Baghdad to which three supervisors were assigned, and Saladin and Waset Governorates where one supervisor was assigned to each,

2- Number of local supervisors was 18 represented by the statistics Director at each Governorate,

3- Number of field researcher was 50. They were assigned to Governorates,

The following table shows the number of field researchers by Governorate in the year 2008:

The number of field researchers by Governorate

| Serial No. | Governorate | No. of researchers | Serial No | Governorate | No. of Researchers | Serial No. | Governorate | No. of researchers |
|------------|-------------|--------------------|-----------|-------------|--------------------|------------|-------------|--------------------|
| 1 | Ninawa | 2 | 7 | Karbala' | 2 | 13 | Thee Qar | 2 |
| 2 | Karkook | 2 | 8 | Waset | 2 | 14 | Misan | 2 |
| 3 | Diala | 2 | 9 | Saladin | 2 | 15 | Al Basra | 2 |
| 4 | Al Anbar | 4 | 10 | Al Najaf | 2 | 16 | Duhok | 4 |
| 5 | Baghdad | 6 | 11 | Al Qadesya | 2 | 17 | Erbil | 4 |
| 6 | Babel | 2 | 12 | Al Muthanna | 2 | 18 | Sulimaneya | 6 |
| Total | | | | | | | | 50 |

Field work continued for 20-25 days according to work volume in each Governorate. A transportation vehicle was allocated to field work teams and central supervisors to ensure competent and efficient execution of field work.

2.7 Clerical work

After field work was completed, questionnaires were subjected to a series of clerical operations which can be summarized in the following:

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- 1- Central supervisor performed checking questionnaires that were completed in the field,
- 2- Checking a sample of completed questionnaires by survey expert,
- 3- Double checking of the questionnaires at the Central Organization for Statistics and Information Technology by employees of Environmental Statistics Directorate,
- 4- Coding of requirements and medications which were added uncoded to the questionnaire,
- 5- Entry of questionnaire data into the computer using Oracle program,
- 6- Performing input data reading to find out odd values which were recheck in the field, or the in charge person was phone called to perform the necessary correction and filter the data after entry operation.

2.8 Results checking

As a preliminary stage, the logicity of data was checked by survey expert and Environmental Statistics Directorate. After completion of the tables, the report was presented to the following entities:

- 1- The higher committee of the survey,
- 2- MOH,
- 3- Ministry of Environment,
- 4- Ministry of Higher Education and Scientific Research,
- 5- Experts from WHO,
- 6- Social Statistics Directorate.

Many comments were received. Comments were reviewed in the questionnaires and, occasionally, at health facilities to ascertain data preciseness. Results were modified accordingly.

3- Summary of central supervisors' work in the follow up of environmental survey of medical services activities in Iraq in 2008

* Number of central supervisors in the environmental survey of medical services activities in Iraq, in 2008 totaled to (9),

* Total number of central supervisors' visits to all Governorates, including Kurdistan Region, summed to (85),

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* Number of health facilities visited by central supervisors and field researchers in a field visit was (211), or (22.3%) of the total number of health facilities,

* Number of health facilities visited by central supervisors after field researchers totaled to (85), or (9.1%) of the total number of health facilities,

* Number of questionnaires clerically checked by central supervisors summed to (429), or (45.3%) of the total number of health facilities.

4- Major technical, administrative and organizational issues encountered by central supervisors and endured by field researchers in during filling in field forms of the survey

* Declination by cadres of health facilities to provide data in (11.1%) of Governorates; an official letter from the MOH, precisely addressed to the hospital or health center was required to provide such data despite the official correspondence of MOH requiring cooperation of its departments with field researchers,

* Unavailability of information on the cost of waste management requirements in (33.3%) of Governorates. Amounts, without reference to the costs, were obtained. Therefore, market prices were relied upon in the estimation of costs,

* Poor knowledge of environmental statistical issues at health facility in (33.3%) of Governorates. That was reflected on the logicity of data. Health researchers then had to repeat field visits, or make phone calls to validate logicity of data pertinent, in particular, to the amounts of hazardous and ordinary waste,

* Difficulty in providing information on the list of fixed assets in health facilities. In (16.7%) of Governorates, field researches endured difficulty in obtaining this as well as other data relevant to the costs of equipment; a factor that resulted in difficult calculation of yearly depreciation,

* Approximate estimation of incinerated amounts of waste by incineration worker in (16.7%) of Governorates. That was due to unavailability of a scale for weighing waste before incineration,

* Approximate estimation of amounts and costs of consumed power due to unavailability of water, electricity and fuel bills at health facilities in (83.3%) of Governorates.

5- Minor technical, administrative and organizational issues encountered by central supervisors and endured by field researchers during filling in field forms of the survey

* Difficulty in obtaining all required data in the survey at one time. This was due to variability of data and the many sources of information at the health facility; both factors necessitated frequent visits to health facilities by field researcher,

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- * Difficulty in obtaining the data required by the field researcher on time. This was due to irregular working hours of employees in charge of statistics at private hospitals,
- * Difficulty in obtaining information relevant to survey questionnaire in some districts and areas due to security issues. Khanqin and Jalula' districts were examples,
- * Unavailability of data on used chemicals in some Governorates with security instability. Such Governorates refer their patients to Baghdad to get some medications,
- * Poor statistical documentation of environmental data at hospitals and health facilities, or mere unavailability of documentation in some health facilities.

6- Procedures implemented by the central supervisor

- * Continued supervision of field researcher and repeated visits to health facilities aiming at obtaining precise data,
- * Emphasizing that field researchers should seek the assistance of statistics employees at health department to ascertain matching of some of the information included in the questionnaire,
- * Emphasizing that field researcher from MOH should obtain information on water, electricity and fuel from the health department to which the health facilities belonged,
- * Emphasizing that information, at health centers exclusively, should be sought directly from the official in charge, and delay should be avoided,
- * Emphasizing that questionnaire should be checked by field researcher and the in charge of data in the very premises of health facility.

7- Analysis of results

1- Table No. (1) is a summary of indicators of environmental survey of medical services activities in Iraq. It is noted in Table No. (1.3) that the ratio between hazardous medical waste¹ and total waste at health facilities that segregate the waste ranges between (10%-25%). That fits well with the sources of World Health Organization. Reviewing the survey results shows that the ratio was 17%, 23% and 25% at State hospitals, private hospitals and other health facilities respectively, which is within the averages shown above.

Table No. (1.6) shows that the amount of generated total waste / patient / day at State hospitals and private hospitals is (0.6) Kg. and (1.8) Kg. respectively.

¹ Annex No. (2)

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The amount of waste generated by inpatients at State hospitals and private hospitals is (5.2) Kg. and (4.5) Kg / inpatient / day respectively.

The amount of total waste generated per bed at State hospitals and private hospitals was (1.02) Kg. and (1.01) Kg. / bed / day. Comparing these figures with international data shows that the amount of generated waste / bed / day at health facilities of East Mediterranean Countries, according to WHO sources, is (1.3 - 3) Kg. / bed / day.

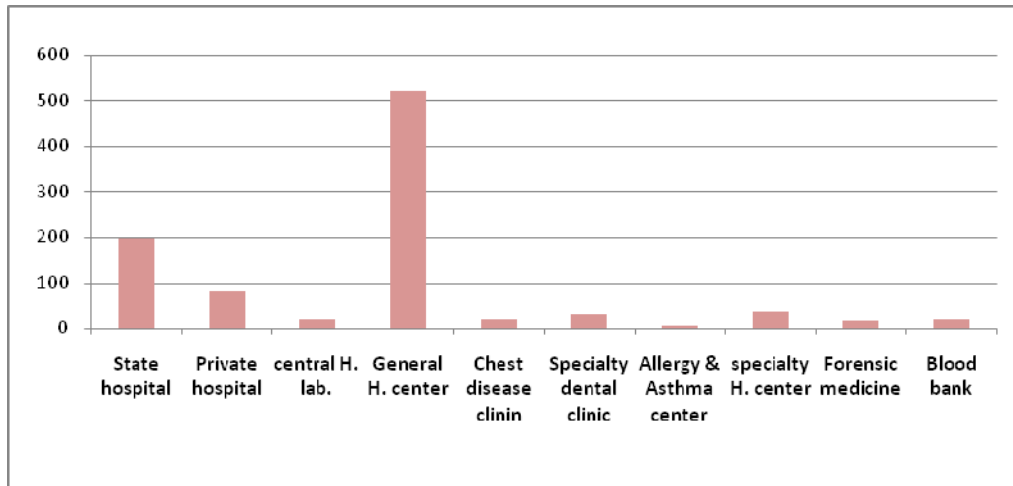
The amount of waste generated / bed / day¹ in Tehran hospitals is (2.7) Kg. and in hospitals of Dhaka, Bangladesh is (1.93) Kg./bed/day and (0.52) Kg./patient/day.

The amount of generated waste per bed or patient per day varies between countries depending on population culture and type and level of health services offered.

2- Table No. (2) shows the number of health facilities by type. The number of health facilities included in the survey totaled to (946) practically functioning facilities. In addition, a small number (43) of facilities were either non functioning, or undergoing rehabilitation.

The survey covered all State hospitals in Iraq Governorates that summed up to (197) hospitals, the majority of which, or (33) hospitals, were centrally located in Baghdad. Sulaimanya came next with (21) State hospitals, while the least number of State hospitals was in Al Muthanna Governorate with (4) hospitals; the reason for this small number is the small population of Al Muthanna compared with the rest of Governorates.

The number of health centers by type



¹ Safe Healthcare Waste Management / Regional Center for Environmental Health Activities – Amman, Jordan 2006
One of the researches published on www.biomedcentral.com , 2008

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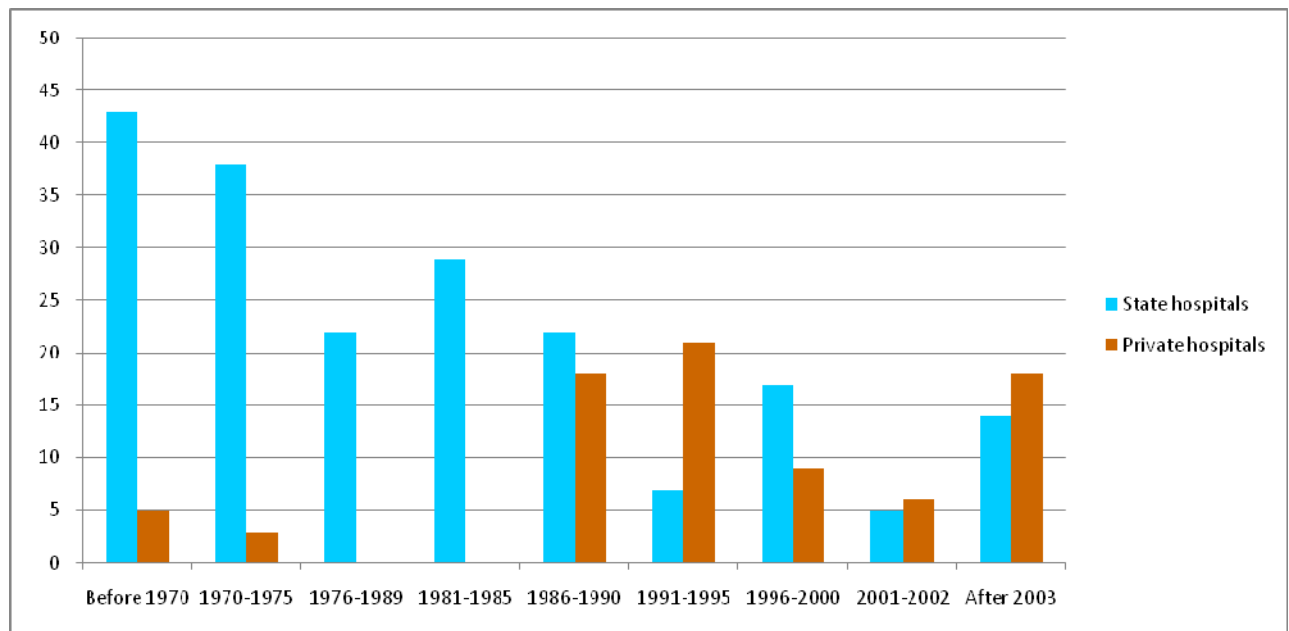
In addition, the survey covered private hospitals with a total number of (80), of which (35) hospitals are in Baghdad. Private hospitals are available in all Governorates except Misan.

The number of main health centers summed to (523), of which (108) were general health center (Main) in Baghdad Governorate, followed by Ninawa and Sulaimaneya with (43) center in each. The least number of those centers was in Diala Governorate with (11) centers (Main). Other health facilities included in the survey were (146) health center comprising central clinical laboratories, forensic medicine, blood banks, specialized health centers etc.

3- It is noted in Table No. (3) that the growth in the construction of State hospitals attained its peak in the seventies. The number of newly constructed State hospitals then totaled to (60) hospitals. Afterward, the number started a decline that continued till the current decade. That was attributed to a decline in health development projects because of the conditions of sanctions and war.

The table shows, as well, that after 2003, only 14 State hospitals were constructed, most of which in were constructed in Sulimaneya and Erbil.

The number of State and private hospitals by the year of construction

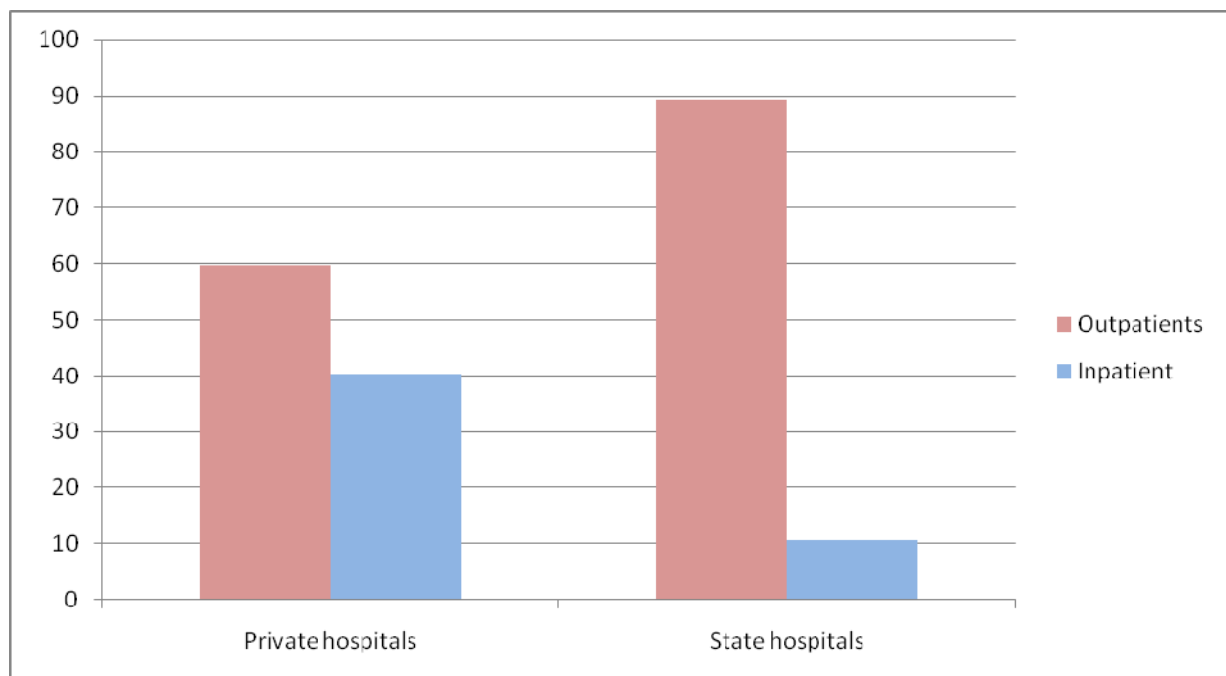


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4- Table No. (4) Shows that most private hospitals were constructed late in the eighties and nineties in all Governorates. It is also noted that no private hospital was constructed in the period (1976-1985), but after 2003, (18) private hospitals were constructed; 8 of which in Kurdistan Region.

5- The number of male and female inpatients in State hospitals in the period 1 Jan., 2008 – 30 June, 2008 totaled to (1190881), while the number of male and female outpatients in State hospitals in the same period was (9972138).

Percentage of inpatients and outpatients at State and private hospitals



The number of male and female inpatients in private hospitals in the same period was (91348), while outpatients' number was (134954) with a higher percentage of females in inpatients and outpatients in both types of hospitals, as shown in Tables No. (6) and (7).

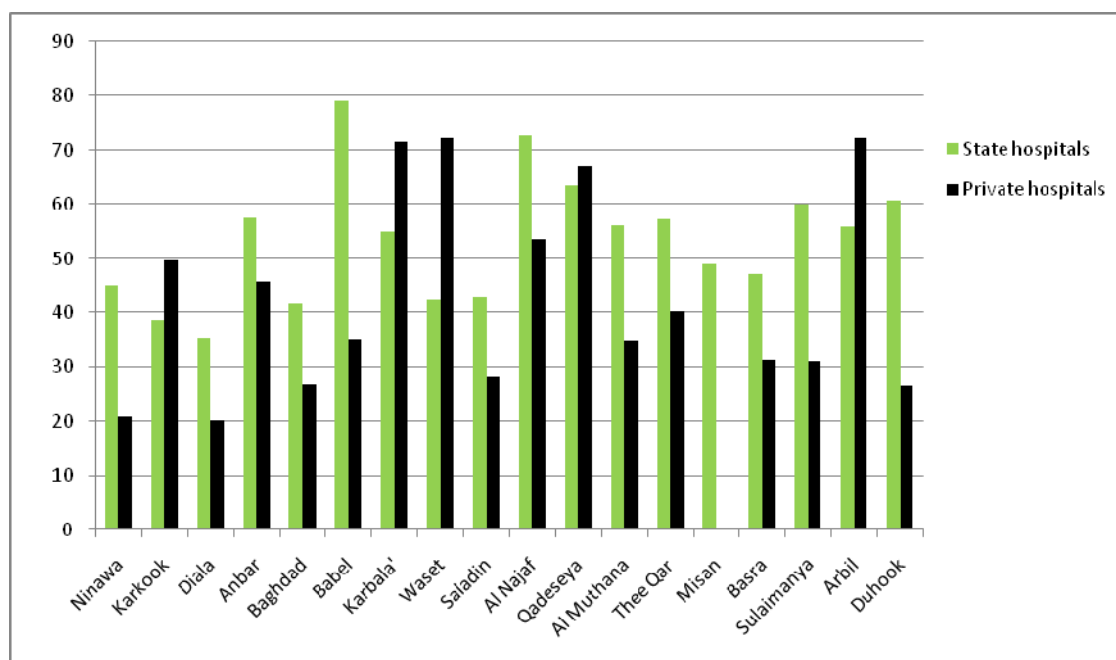
The percentage of inpatients of the total number of patients (inpatients and outpatients) in State hospitals was (10.7%), while the percentage in private hospitals was (40.4%). It could be

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inferred from such data that State hospitals receive large numbers of outpatients seeking examination and treatment, because of limited charges and availability of medications at State hospitals. In private hospitals, outpatients' number decreases and inpatients' number increases because of the nature of health services offered at those hospitals which is in the form of surgical operations and deliveries.

6- The bed occupancy rate in State hospitals, as seen in Table No. (8), is (49.8%), while at private hospitals the rate was (34.8%). The highest bed occupancy rate at State hospitals was in Babel Governorate where it hit (79.1%), and the least (35.5%) was in Diala Governorate.

Bed occupancy rate at State and private hospitals



Bed occupancy rate is calculated according to the following formula¹:

$$\text{Bed occupancy rate \%} = \frac{\text{Number of in hospital days of all patients in the 6 months period} \times 100}{\text{Number of beds equipped for inpatients} \times 182 \text{ days}}$$

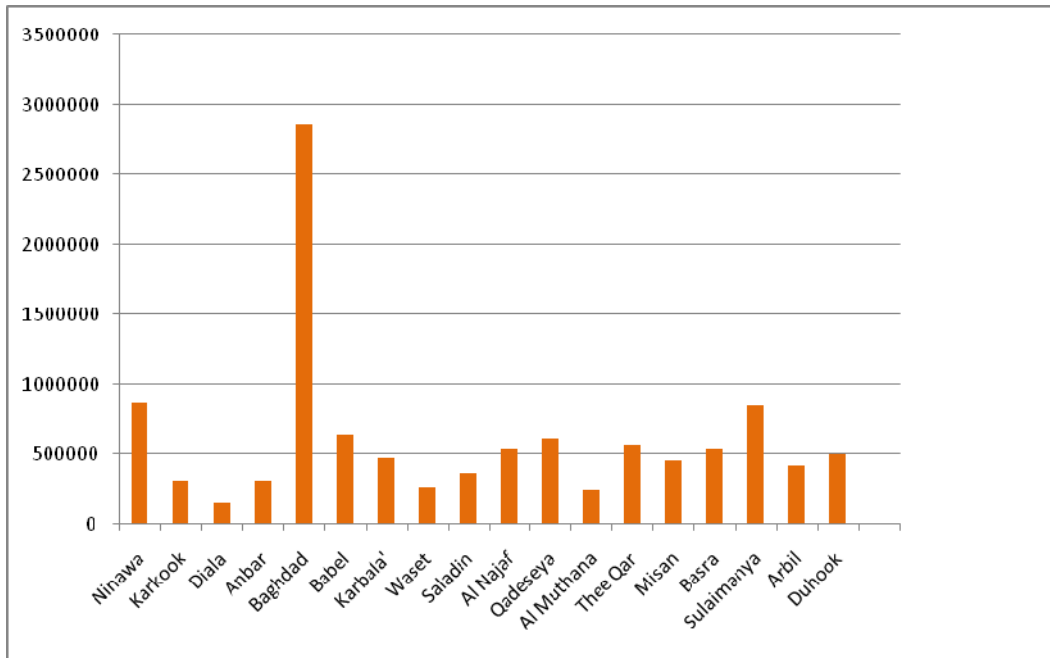
¹ Annex No. (2)

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7- Table No. (9) Shows that outpatients' number at other health facilities (except hospitals) included in the survey was (10944390) in the six months period. The numbers variation among Governorates is noted. Baghdad Governorate had the largest number of outpatients where they totaled to (2857377), while the least number was in Diala Governorate where it was (147785).

The number of outpatients at general health centers (main) was (9352994), and outpatients at forensic medicine was (18415).

The number of Outpatients at Other Health facilities

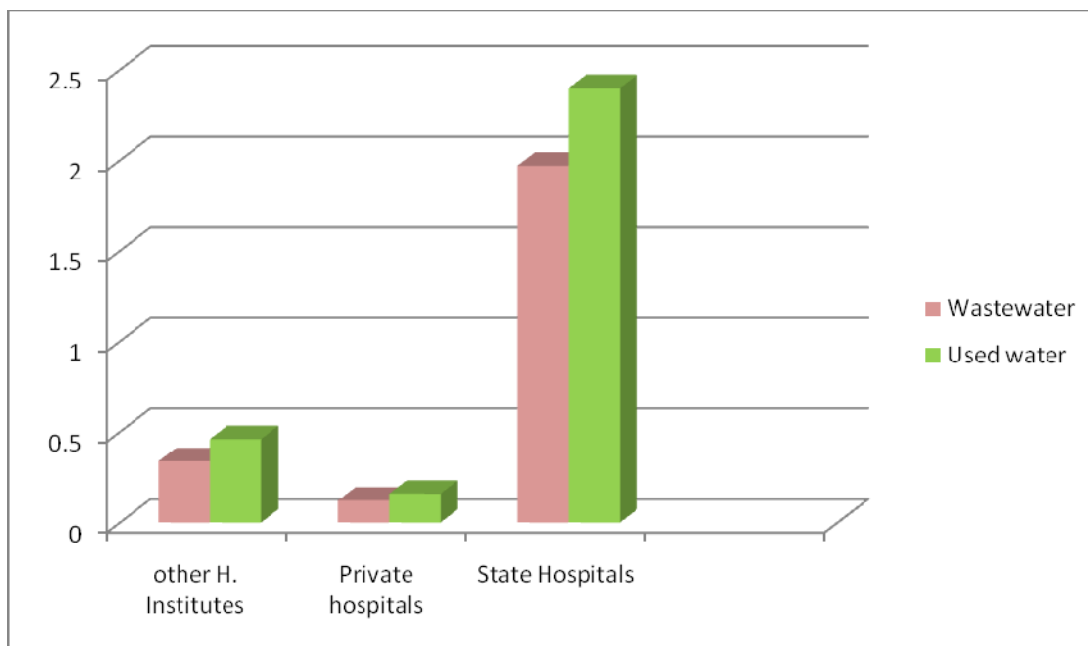


8- Looking into Table No. (15) reveals that the volume of used water at State hospitals in the six months period was (2.4) million cubic meters, while at private hospitals it totaled to (0.16) million cubic meters. The volume of water consumed per patient at State and private hospitals was (211) and (698.8) liter / patient respectively. The consumption depends on the nature of work of those hospitals, the type of health services offered and kind of patients. At private hospitals, the majority of patients are inpatients and accompanied by escorts, and health services are mainly surgical operations and deliveries, while at State hospitals, they are mostly outpatients. It is to be noted that the term "used water" comprises all uses of water including drinking water, water for cleaning outside yards and cooling water, if available.

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Table No. (16) Shows that the volume of used water at other facilities was (0.46) million cubic meters. This indicates that the patient's consumption of water per day was (40) liters, noting that all patients were outpatients.

Volume of Used Water and Wastewater at State and Private Hospitals and Other Health facilities /Million Cubic Meters



The two tables also indicate that the most common source of water used at all health facilities, including hospitals, is the network of running water. Kurdistan region is famed for utilization of wells water as an additional source.

9- Table No. (17) shows that the volume of wastewater generated at State hospitals in the six months period was (1.97) cubic meters, of which (0.2%) was treated at treatment units, (70.6%) was discarded to sewer network and (15.4%) was collected in sealed septic pits.

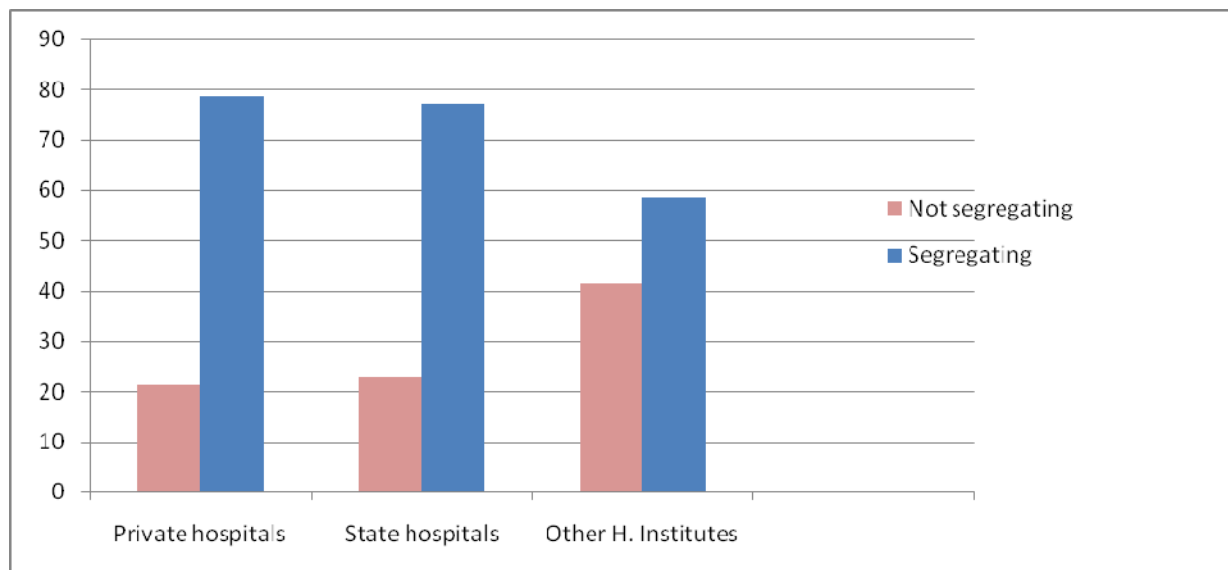
The amount of wastewater in private hospitals in the six months was (122.7) thousand cubic meters, of which (80.8%) was discarded to sewer network, and (18.4%) were collected in sealed septic pits. Table No. (18) Shows that the wastewater amount at other health facilities totaled to (338) thousand cubic meters, of which (70.2%) was discarded to sewer network and (25.5%) was collected in sealed septic pits.

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It is worthy to mention that there is no treatment, at all, of wastewater generated at private hospitals and other health facilities. The percentages shown have serious significance, because most of the generated wastewater drains into sewer network and, subsequently, to rivers without any treatment of its hazardous contents.

10- It is noted in Tables Nos. (20) and (21) that State hospitals committed to segregation of medical hazardous waste ¹ separate from ordinary waste constituted (77.1%) , whilst the percentage of commitment to segregation of private hospitals was (78.7%). The rest of other health facilities were committed to segregation in (58.6%) of cases. Percentage of commitment differs amongst Governorates. Segregation by implementation of color coding is dependent on the type of health facilities; whether a State hospital, a private hospital, a health center,...etc. Yellow color, which is the color approved by WHO, was noted to be the most commonly used for bags and hazardous medical waste containers.

Percentage of health facilities implementing / not implementing regulations of segregation



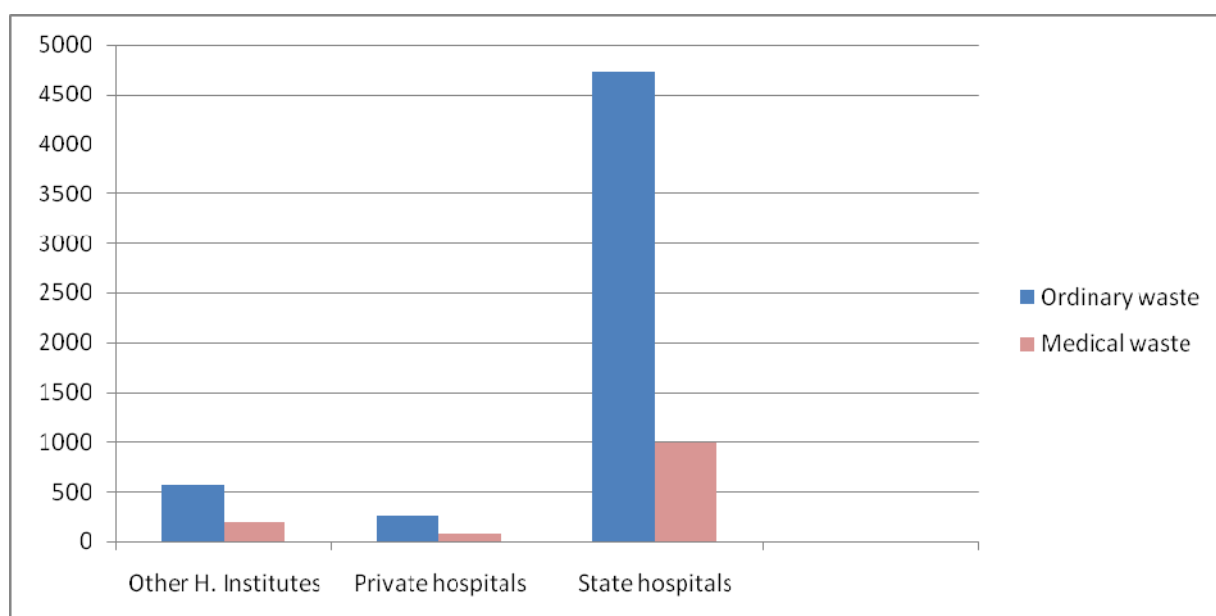
11- In the six months period, the amounts of ordinary waste disposed by State hospitals summed into (990) thousand Kg., or (5.4) thousand Kg. per day. Private hospitals disposed (76.4) thousand Kg., or (0.4) thousand Kg. per day. The rest of health facilities disposed (194) thousand Kg., or (1.3) thousand Kg. per day.

¹ Annex No. (2)

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The most common method of final disposal of hazardous waste¹ in State hospitals and other health facilities is incineration in a private incinerator located onsite. The method used by private hospitals is incineration outside the location in a central incinerator as shown in Tables (22) and (23).

Amounts of Medical And Ordinary waste Generated at Health facilities in six months (Ton)



An amount of radioactive waste totaling (76) Kg/day is generated at hospitals specializing in nuclear medicine and treatment of tumors. Those hospitals are located in Baghdad, Ninawa and Kurdistan region. Though of relatively small amounts compared to the total waste generated by all health facilities, yet radioactive waste is considered very hazardous due to the hazardous nature of its constituents and the long standing effects on human and environment.

12- Tables Nos. (26) and (27) show that in the six months period, the amount of ordinary waste disposed by State hospitals totaled (4.7) million Kg. or (26) thousand Kg. per day, while the amounts of waste disposed by private hospitals summed into (252) thousand Kg., or (1.4) thousand Kg. per day. Other health facilities disposed (559) thousand Kg. of ordinary waste, or (3.7) thousand Kg. per day.

¹ Annex No. (2)

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13- Further to the above mentioned on waste segregation, only (45) State hospitals, or (22.8% of all State hospitals), (17) private hospitals, or (21.3% of all private hospitals) and (227) health facilities, or (41.4% of all health facilities) do not implement the regulation of waste segregation. This is shown in tables No. (30) and (31), noting that the majority of health facilities included in the survey lacked records for data documentation.

In the six months period, the amount of total waste disposed by State hospitals not committed to the regulation of waste segregation was (522) thousand Kg. (unsegregated waste), or (2.9) thousand Kg. per day, private hospitals disposed (82.5) thousand Kg., or (0.4) thousand Kg per day. And other health facilities disposed (424) thousand Kg., or (2.8) thousand Kg. per day. Being unsegregated, such wastes should be handled as hazardous waste.

Tables Nos. (32, and 33) show that the most common method used in the disposal of this waste was handing it to the municipality to dump or burn.

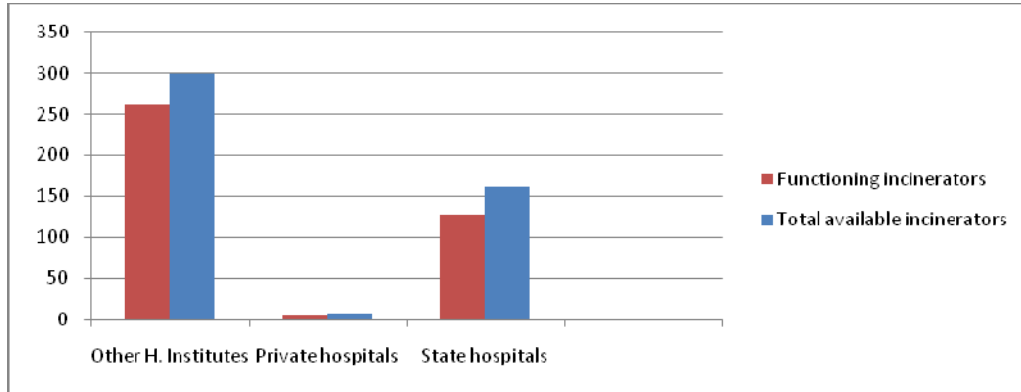
14- Table No. (34) Shows that the number of workers in charge of waste collection and transportation services at State hospitals was (3712) with (35.5%) of them trained on the hazards of wastes. At private hospitals, the number was (339) workers, with the percentage of trained workers amounting to (26.2%) and in other health facilities, the number of workers totaled (2280); with trained workers constituting (16.4%).

15- Tables Nos. (42), (43), (44) and (45) show the number of incinerators at State hospitals. The number were (162) incinerators of which (128) incinerators were functioning and (94) incinerators were conforming to environmental standards¹. At private hospitals, there were (7) incinerators; (5) functioning and (3) in conformity with Environmental standards. Finally, there were (261) incinerators in other health facilities; (261) functioning ones, and (79) incinerators in conformity with environmental standards. This data is according to the information provided by the administrations of health facilities.

Total number of incinerators and number of functioning incinerators in health facilities

¹ Annex No. (2)

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16- As shown in Tables Nos. (43) And (43), the estimated amounts of incinerated waste in the six months are (2.27) million Kg. in State hospitals, (28.4) thousand Kg. in private hospitals and (546) thousand Kg. in other health facilities.

17- It is noted in Tables Nos. (56) And (57) that in the six months period, the costs in million Iraqi Dinars of requirements used in waste management in the six months were (1526.1) in State hospitals, (103.4) in private hospitals and (487.9) in other health facilities.

In the six months period, the total costs , in million Iraqi Dinars, of waste treatment, including requirements used in waste management, labor wages and the value of yearly depreciation of used equipment, were (5447.3) in State hospitals, (642.4) in private hospitals and (3573.1) in other health facilities.

Annex No. (2)

Terms and concepts

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Terms and concepts

Medical waste:

Medical waste is all waste disposed by hospitals, clinics, laboratories and other health facilities. It includes non hazardous (regular) and hazardous medical waste.

Hazardous medical waste

This is the waste generated from examination, diagnoses, treatment, surgery, dissection, laboratory tests and others which could cause serious risks to human and environment if unsafely handled. It constitutes 10 – 25% of total medical waste

Regular medical waste

Waste disposed by hospitals, clinics, laboratories and other health facilities which is generated from administrative activities and services, such as kitchen waste, food residues, storage requirementsetc. it is quite similar to ordinary waste and represents 75 – 90% of the total waste generated from health services.

The calculation of hazardous medical waste amount generated at health facilities is done by weighing the waste generated from examination, diagnoses, treatment, surgery and laboratory tests and segregated into containers and bags specified for medical waste.

Percentage of medical waste ratio to ordinary waste is calculated according to this formula:

$$\text{Percentage of hazardous medical waste} = \frac{\text{amount of hazardous medical waste}}{\text{Total amount of waste}} \times 100$$

N.B. The word (patient) represents all inpatients and outpatients in hospitals and HEALTH FACILITIES. However, the waste amount per bed represents the amount of waste that is generated from inpatients.

Bed occupancy rate

The actual occupancy of beds in a defined period is calculated by dividing the total number of days which all patients stay in hospital in a defined period by the number of beds and multiplying the outcome by the defined period (i.e. one year or six months), then multiplying by 100.

This is summarized in the following formula:

$$\text{Bed occupancy rate} = \frac{\text{No. of inpatients' days in a hospital for six months}}{\text{No. of beds equipped for inpatients} \times 182 \text{ days}} \times 100$$

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Hazardous medical waste can be classified into:

*** Pathological waste**

Examples: tissue, organs and human parts such as internal organs, placentas, embryosetc, body fluids, blood and others such as blood bags, contaminated urine, samples drawn for laboratory tests, diapers, dressings, masks, used contaminated gloves, ...etc.

*** Infectious waste**

This the waste expectedly containing causative agents of infections (bacteria, viruses, parasites, and fungi) in concentrations and amounts sufficient to cause infection.

Examples: culture media used in laboratory work, tissue, material and equipment in contact with blood and body fluids of infected patients undergoing surgical procedures, body fluids, swabs, dressings and clothes contaminated with blood and body fluids from surgical wards, dissection and isolation wards, instruments and requirements of renal dialysis, such as aprons, gloves, towels,.....etc.

*** Sharps and wounding waste**

Anything that causes wounds, punctures or cuts.

Examples: disposable syringes, scalpels, blades, knives, saws, pieces of broken glass, nails,etc, Those objects are considered highly hazardous, even if they are not infectious.

*** Chemical waste**

Chemical waste includes liquid, solid and gaseous chemicals. Such chemicals are either hazardous when characterized with toxicity, oxidizing, inflammability or high reactivity, or non hazardous such as sugars, amino acids and some organic and non organic waste.

Examples: Formaldehyde used in cleaning, sterilization, chemicals used in photography in X-Ray rooms, solvents, dyes, reagents, acids, alkalis, oxidants and others used in pathology, histology and hematology laboratories, detergent and sterilizing fluids used in cleaning floors, chemicals in laundry, coolants, grease and oil used in maintenance sectionetc.

*** Pharmaceutical waste**

Examples: expired, unused, spilled or contaminated medications, unneeded vaccines and sera that need be discarded, containers of residues of contaminated drugs, masks and gloves

*** Waste with high content of heavy metals**

Examples: wastes of mercury from spills, broken medical equipment, dental work, cadmium from used batteries and lead used in lining equipment and X-Ray rooms and some other diagnostic sections.

*** Pressurized containers**

Examples: pressurized gas cylinder no more needed, such as anesthetic gases, sterilization gases of surgical instruments, bottles of oxygen and CO2 gases used in endoscopy and daerosol bottles which need be handed with care because they may explode if punctured or burnt.

Environmental Survey of Medical Services Activities in Iraq in 2008

* **Radioactive waste**

This waste includes material contaminated with radiation from diagnostic activities, such as internal organ imaging, defining tumors location and treatment of cancer of thyroid gland.

Examples: solutions, disposable syringes, glass requirements used in diagnosis and treatment and secretions of patients treated or examined using radioactive material.

* **Genotoxic waste**

This is highly hazardous waste that has carcinogenic, mutagenic and tumorigenic characteristics.

Examples: drugs residues and expired medications used in the treatment of malignant tumors and organ transplant, waste and secretions of patients using this kind of medications and medical requirements such as disposable syringes and bottles used in the preparation of this type of medications.

For each type of these medications, there is a defined method of collection separate from others and method of final disposal based on the hazardous characteristics of its constituents.

Segregation

Segregation means separation, or isolation of ordinary waste apart from hazardous medical waste at point of generation in specified containers in order to treat each type in a defined safe method and to avoid collection of both types together.

Segregation by colors

This a color coding system for all types of containers (bags, containers....etc) specified to the collection of types of waste (for example: black color is specified for bags and containers for the collection of ordinary waste, yellow color is specified for the collection of pathological medical waste).

Specifications of incinerators

- 1- Should be electrically operated,
- 2- Incinerator should be equipped with filters to remove solid particulate emitted from burning which could affect the surrounding environment,
- 3- The stack height should be in proportion with the height of neighboring houses and no less than two meters higher than the roof of near by houses,
- 4- The incinerator capacity should be proportional to the hospital capacity and the amount of solid waste which need be incinerated,
- 5- The incinerator should be constructed within the fence of the hospital and in a location that ensures no effect on the close by buildings, provided the distance between incinerator site and close by building is not less than 15 meter.

Disposal and treatment methods of medical waste

Incineration

This is the most common used method for the treatment of hazardous medical waste. It is an oxidation process performed in very high temperatures, where organic and combustible wastes are reduced, their size and weight are substantially minimized and contents of pathological causative agents are killed. Gases, such as carbon and nitrogen oxides and other toxic gases, as well as ash, residue result from the incineration process.

For this operation, specified incinerators with different technologies and capacities are used for the incineration of defined types of hazardous medical waste at different temperatures.

Storage (isolated collection)

This is a method to collect and isolate radioactive waste, or waste mixed with hazardous waste, before treatment or disposal of such waste, possibly in surface lowland, or geological stores. These are caves deeply dug underground.

Special location for dumping hazardous waste

This is a location which is geologically specified and has particular characteristics for dumping hazardous waste, including medical waste, in isolated sites under supervision and control of specialized entities.

Recycling

This means reuse of waste that is supposed to be disposed of. Recycling may include the introduction of waste in other operations to produce another product.

Sealed septic pit

A pit designed on bases of containment of liquid waste in a way that allows no permeability or seepage to the near by soil.

Encapsulation

This is a process in which waste is buried in sealed high density plastic containers, or metallic barrels. The barrels are then filled with plastic foam, cement mix or hard mud. Consequently, it can be dumped in landfill. This method is usually resorted to for pharmaceutical and sharp wastes.

Chemical sterilization

In this method, sterilizing chemicals are added to the waste to kill pathological causative agents contained in it. It is also used in some types of pathological waste, such as blood and urine and secretion of patients. Sharp waste requires destruction prior to chemical sterilization.

Sterilization with wet heat or steam (autoclaving)

Exposing waste to high temperature and pressure is a method used for sharp waste and waste of laboratories, such as the culture media of bacteria.

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Sterilization by microwave

After crushing and damping, waste is exposed to high frequency short waves sufficient to effect a rapid heating of waste fluids in a way that results in killing pathological agents with the high heat produced. The method is used in the treatment of infectious, pathological and sharp wastes.

Inertization

This is an operation where waste is mixed with cement or lime before final disposal. It aims at reducing hazards of waste toxicity. This method is used in the treatment of pharmaceutical waste and ash that contains heavy metals.

Summary of indicators of Environmental Survey of Medical Services Activities in Iraq in 2008

Table No. (1.1): Number of Health facilities & patients by facility type

| Indicator | State hospital | Private hospital | Other Health facility | Total |
|---|-----------------------|-------------------------|------------------------------|--------------|
| Total No. of health facilities included in the survey | 197 | 80 | 669 | 946 |
| Total No. of inpatients in the six months period | 1190881 | 91348 | - | 1282229 |
| Total No. of outpatients in the six months period | 9972138 | 134954 | 10944390 | 21051482 |
| Total No. of patients in the six months (inpatients + outpatients) | 11163019 | 226302 | 10944390 | 22333711 |
| Percentage of inpatients to No. of patients (inpatients + outpatients) % | 10.7 | 40.4 | - | - |
| No. of beds equipped for inpatients | 33691.0 | 2229.0 | - | - |
| Average of bed occupancy in the six months period | 49.8 | 34.8 | - | - |

Other facilities including health centers, central health laboratories, forensic medicine, blood banks and other specialty centers

The overall average of bed occupancy rate is calculated by dividing the number of patients in hospital days / (number of equipped beds for inpatients X 182 days, equivalent to 6 months)

Table No. (1.2): Volume of consumed water, generated wastewater and daily consumption by facility type

| Indicator | State hospital | Private Hospital | Other Health facilities | Total |
|---|-----------------------|-------------------------|--------------------------------|--------------|
| Volume of consumed water in the six months (Cu. meter) | 2360239.5 | 158149.0 | 455538.3 | 2973926.8 |
| Volume of wastewater in the six months (Cu. meter) | 1969128.5 | 122672.0 | 336981.2 | 2428781.7 |
| Daily consumption of water (Liter / Patient) | 0.21 | 0.70 | 0.04 | - |

Table No. (1.3): Number of facilities committed to medical waste segregation regulation and amounts of segregated waste by facility type

| Indicator | State hospital | Private hospital | Other health facility | Total |
|---|-----------------------|-------------------------|------------------------------|--------------|
| No. of health facilities committed to regulation of waste segregation | 152 | 63 | 392 | 607 |
| Percentage of health facilities committed to Regulation of waste segregation % | 77.2 | 78.8 | 58.6 | 64.2 |
| Amount of hazardous medical waste in six months (1000 Kg.) | 990.1 | 76.4 | 194.1 | 126.6 |
| Amount of hazardous medical waste (Kg./Day) | 5440 | 420 | 5440 | 5540.8 |
| Amount of radioactive waste in six months (1000 Kg.) | 13.8 | - | - | - |
| Amount of ordinary waste in six months(1000 Kg.) | 4729.3 | 252.3 | 559.2 | 5540.8 |
| Amount of ordinary waste (Kg./Day) | 25984.9 | 1386.1 | 3727.7 | 31098.7 |
| Percentage of hazardous medical waste in total generated waste % | 17.3 | 23.3 | 25.8 | 18.7 |
| Daily average amount of hazardous waste(Kg./Institute) | 35.4 | 7.3 | 3.1 | - |
| Daily average amount of ordinary waste(Kg./Institute) | 173.8 | 24.7 | 9.4 | - |

Table No. (1.4): Number of health facilities not committed to regulations of medical waste segregation and amount of unsegregated waste by facility type

| Indicator | State hospital | Private hospital | Other health facilities | Total |
|--|----------------|------------------|-------------------------|--------|
| No. of health facilities not committed to regulations of waste segregation | 45 | 17 | 277 | 339 |
| Percentage of health facilities not committed to regulation of waste segregation % | 22.8 | 21.3 | 41.4 | 35.8 |
| Amount of unsegregated waste in the six months (1000 Kg.) | 522.2 | 82.5 | 423.8 | 1028.5 |
| Amount of unsegregated waste (Kg. / Day) | 2869.1 | 453.5 | 2825.5 | 6148.1 |

Table No. (1.5): Number of workers and incinerators and amount of incinerated waste by facility type

| Indicator | State hospital | Private hospital | Other health facilities | Total |
|---|----------------|------------------|-------------------------|---------|
| No. of workers in charge of waste collection | 3712 | 339 | 2280 | 6331 |
| No. of incinerators in health facilities included in the survey | 162 | 7 | 300 | 469 |
| Amount of waste incinerated (Kg./Day) | 15132.9 | 156.3 | 3639.9 | 18929.1 |

Table No. (1.6): Total amounts of segregated and unsegregated waste in relation to outpatient or inpatient by facility type

| Indicator | State hospital | Private hospital | Other Health facilities | Total |
|---|----------------|------------------|-------------------------|---------|
| Amount of segregated and unsegregated waste In the six months (1000Kg.) | 6241.6 | 411.3 | 1177.2 | 8572.7 |
| Amount of segregated & unsegregated waste (Kg./Day) | 34294.0 | 2261.4 | 7847.5 | 44402.9 |
| Amounts of total waste per patient (Kg./Patient/Day) | 0.6 | 1.8 | 0.1 | - |
| Amount of total waste per bed (Kg./Bed/Day) | 1.02 | 1.01 | - | - |

Table No. (1.7): Costs of waste treatment and water and electricity consumption by facility type

| Indicator | State hospital | Private hospital | Other Health facilities | Total |
|---|----------------|------------------|-------------------------|---------|
| Requirements of waste management (1000 Dinar) | 1526067 | 193448 | 487968 | 2207483 |
| Costs of waste treatment (1000 Dinar) | 5447306 | 642428 | 3573149 | 9662883 |
| Costs of water consumed (1000 Dinar) | 245945 | 17906 | 45732 | 309583 |
| Costs of energy except electricity (1000 Dinar) | 5487270 | 1512281 | 1963210 | 8962761 |

Table No. (2). Number of health facilities by type and Governorate:2008

| Governorate | State hospital | Private hospital | Central health labs | General Health Center (major) | Chest disease clinic | Special. dental center | Allergic disease /asthma center | Special. Health center | Forensic Medicine | Blood Bank | Total |
|-------------------------|----------------|------------------|---------------------|-------------------------------|----------------------|------------------------|---------------------------------|------------------------|-------------------|------------|------------|
| Ninawa | 14 | 3 | 1 | 43 | 1 | 2 | 0 | 1 | 1 | 1 | 67 |
| Karkook | 6 | 2 | 1 | 29 | 1 | 1 | 1 | 0 | 1 | 1 | 43 |
| Diala | 9 | 3 | 1 | 11 | 1 | 1 | 0 | 0 | 1 | 1 | 28 |
| Anbar | 12 | 1 | 1 | 19 | 1 | 1 | 0 | 0 | 1 | 1 | 37 |
| Baghdad | 39 | 35 | 2 | 108 | 1 | 13 | 1 | 14 | 1 | 2 | 216 |
| Babel | 8 | 3 | 1 | 29 | 1 | 1 | 1 | 0 | 1 | 1 | 46 |
| Karbala | 5 | 2 | 1 | 18 | 1 | 1 | 0 | 0 | 1 | 1 | 30 |
| Waset | 9 | 1 | 1 | 17 | 1 | 1 | 0 | 0 | 1 | 1 | 32 |
| Saladin | 9 | 1 | 1 | 14 | 1 | 1 | 0 | 0 | 1 | 1 | 29 |
| Najaf | 6 | 3 | 1 | 17 | 1 | 1 | 0 | 0 | 1 | 1 | 31 |
| Al Qadeseya | 5 | 2 | 1 | 24 | 1 | 1 | 0 | 0 | 1 | 1 | 36 |
| Al Muthana | 4 | 1 | 1 | 15 | 1 | 1 | 1 | 0 | 1 | 1 | 26 |
| Thee Qar | 8 | 1 | 1 | 25 | 1 | 2 | 0 | 0 | 1 | 1 | 40 |
| Misan | 6 | 0 | 1 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 33 |
| Basra | 12 | 5 | 1 | 41 | 1 | 1 | 1 | 0 | 1 | 1 | 64 |
| Kurdistan Region | | | | | | | | | | | |
| Sulimaneya | 21 | 7 | 2 | 43 | 1 | 1 | 1 | 8 | 1 | 1 | 86 |
| Erbil | 17 | 6 | 1 | 26 | 1 | 1 | 0 | 4 | 0 | 0 | 56 |
| Dhook | 7 | 4 | 1 | 23 | 1 | 0 | 0 | 8 | 1 | 1 | 46 |
| Total | 197 | 80 | 20 | 523 | 18 | 31 | 6 | 36 | 17 | 18 | 946 |

Table No. (3): Number of State hospital by the year of construction and Governorate

| Governorate | Before 1970 | 1970-1975 | 1976-1980 | 1981-1985 | 1986-1990 | 1991- 1995 | 1996- 2000 | 2001- 2002 | After 2003 |
|-------------------------|--------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Ninawa | 5 | 3 | 2 | 0 | 2 | 0 | 0 | 1 | 1 |
| Karkook | 3 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| Diala | 2 | 2 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| Anbar | 2 | 5 | 0 | 0 | 4 | 0 | 1 | 0 | 0 |
| Baghdad | 12 | 10 | 1 | 4 | 5 | 1 | 2 | 2 | 2 |
| Babel | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| Karbala | 0 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 0 |
| Waset | 1 | 0 | 2 | 1 | 1 | 1 | 2 | 1 | 0 |
| Saladin | 1 | 2 | 2 | 3 | 0 | 0 | 1 | 0 | 0 |
| Najaf | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 |
| Al Qadeseya | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| Al Muthanna | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| Thee Qar | 2 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 1 |
| Misan | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Basra | 3 | 4 | 2 | 0 | 1 | 2 | 0 | 0 | 0 |
| Kurdistan Region | | | | | | | | | |
| Sulimaneya | 2 | 1 | 2 | 3 | 3 | 0 | 5 | 0 | 5 |
| Erbil | 2 | 0 | 4 | 5 | 0 | 1 | 2 | 0 | 3 |
| Dhook | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 |
| Total | 43 | 38 | 22 | 29 | 22 | 7 | 17 | 5 | 14 |

Table No. (4): Number of private hospitals by the year of construction and Governorate

| Governorate | Before 1970 | 1970 - 1975 | 1976 -1980 | 1981- 1985 | 1986 - 1990 | 1991-1995 | 1996-2000 | 2001- 2002 | After 2003 |
|------------------|-------------|-------------|------------|------------|-------------|-----------|-----------|------------|------------|
| Ninawa | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| Karkook | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Diala | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| Anbar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Baghdad | 4 | 3 | 0 | 0 | 11 | 9 | 2 | 2 | 4 |
| Babel | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 |
| Karbala | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Waset | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Saladin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Najaf | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| Al Qadeseya | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Al Muthana | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Thee Qar | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Misan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Basra | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 1 |
| Kurdistan Region | | | | | | | | | |
| Sulimaneya | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 3 |
| Erbil | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 |
| Dhook | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| Total | 5 | 3 | 0 | 0 | 18 | 21 | 9 | 6 | 18 |

Table No. (5): Number of wards, operating theatres and total beds and number and percentage of beds equipped for in patients at State and private hospitals by Governorate: 01/01/2008 – 30/06/2008

| Governorate | Type | No. of wards | No. of operating theatres | Total No. of beds | No. of beds equipped for inpatients | % of beds equipped for inpatients of total No. of beds |
|--------------------|-------------|---------------------|----------------------------------|--------------------------|--|---|
| Ninawa | State | 114 | 58 | 3326 | 3006 | 90.4 |
| | Private | 2 | 9 | 116 | 116 | 100.0 |
| Karkook | State | 57 | 27 | 1180 | 1180 | 100.0 |
| | Private | 0 | 6 | 56 | 56 | 100.0 |
| Diala | State | 57 | 27 | 1164 | 977 | 83.9 |
| | Private | 3 | 7 | 64 | 54 | 84.4 |
| Anbar | State | 108 | 43 | 1552 | 1245 | 80.2 |
| | Private | 0 | 3 | 24 | 24 | 100.0 |
| Baghdad | State | 464 | 281 | 11148 | 9367 | 84.0 |
| | Private | 58 | 106 | 1203 | 1108 | 92.1 |
| Babel | State | 79 | 22 | 1428 | 1254 | 87.8 |
| | Private | 20 | 7 | 60 | 60 | 100.0 |
| Karbala | State | 40 | 17 | 957 | 876 | 89.8 |
| | Private | 3 | 9 | 68 | 67 | 89.5 |
| Waset | State | 68 | 31 | 1536 | 1357 | 88.3 |
| | Private | 0 | 2 | 20 | 20 | 100.0 |
| Saladin | State | 54 | 25 | 1523 | 1338 | 87.9 |
| | Private | 0 | 5 | 35 | 25 | 71.4 |
| Najaf | State | 57 | 13 | 1454 | 1009 | 69.4 |
| | Private | 0 | 9 | 92 | 92 | 100.0 |
| Al Qadeseya | State | 174 | 27 | 1069 | 985 | 92.1 |
| | Private | 6 | 6 | 43 | 43 | 100.0 |
| Al Muthana | State | 45 | 14 | 887 | 863 | 97.3 |
| | Private | 1 | 2 | 20 | 20 | 100.0 |
| Thee Qar | State | 157 | 31 | 1034 | 976 | 94.4 |
| | Private | 0 | 3 | 48 | 20 | 41.7 |

| Governorate | Type | No. of wards | No. of operating theatres | Total No. of beds | No. of beds equipped for inpatients | % of beds equipped for inpatients of total No. of beds |
|-------------------------|---------|--------------|---------------------------|-------------------|-------------------------------------|--|
| Misan | State | 49 | 17 | 1038 | 1036 | 99.8 |
| | Private | 0 | 0 | 0 | 0 | 0.0 |
| Basra | State | 112 | 48 | 3468 | 2938 | 84.7 |
| | Private | 0 | 21 | 180 | 180 | 100.0 |
| Kurdistan Region | | | | | | |
| Sulimaneya | State | 120 | 58 | 2450 | 1988 | 81.1 |
| | Private | 62 | 21 | 125 | 138 | 90.8 |
| Erbil | State | 208 | 60 | 2427 | 2201 | 90.7 |
| | Private | 41 | 24 | 171 | 140 | 81.9 |
| Dhook | State | 42 | 30 | 1099 | 1095 | 99.6 |
| | Private | 7 | 15 | 87 | 66 | 75.9 |
| Total | State | 2005 | 829 | 38758 | 33691 | 86.9 |
| | Private | 203 | 255 | 2439 | 2229 | 91.4 |

Table No. (6): Number of outpatients and inpatients at State and private hospitals by sex and Governorate: 01/01/2008 – 30/06/2008

| Governorate | Type | INPATIENTS | | | OUTPATIENTS | | Total |
|-------------|---------|------------|---------|--------|-------------|---------|---------|
| | | Males | Females | Total | Males | Females | |
| Ninawa | State | 29929 | 75885 | 105814 | 360016 | 450577 | 810593 |
| | Private | 429 | 613 | 1105 | 0 | 0 | 0 |
| Karkook | State | 19670 | 19640 | 39310 | 65079 | 55041 | 120120 |
| | Private | 797 | 1270 | 2067 | 0 | 0 | 0 |
| Diala | State | 10920 | 20461 | 31381 | 116556 | 137901 | 254457 |
| | Private | 266 | 765 | 1031 | 550 | 817 | 1367 |
| Anbar | State | 28267 | 35965 | 64272 | 296447 | 349285 | 645732 |
| | Private | 200 | 900 | 1100 | 100 | 300 | 400 |
| Baghdad | State | 92674 | 93411 | 186085 | 939640 | 888265 | 1827905 |
| | Private | 10468 | 31131 | 41599 | 20437 | 60680 | 81117 |
| Babel | State | 94574 | 38878 | 73452 | 197284 | 244636 | 441920 |
| | Private | 696 | 1677 | 2373 | 0 | 0 | 0 |
| Karbala | State | 23908 | 37077 | 60985 | 247846 | 198884 | 446790 |
| | Private | 1209 | 1279 | 3588 | 100 | 180 | 280 |
| Waset | State | 21563 | 23185 | 53748 | 218874 | 354647 | 5573521 |
| | Private | 825 | 494 | 1319 | 0 | 0 | 0 |
| Saladin | State | 11716 | 23038 | 34754 | 213472 | 232589 | 446331 |
| | Private | 61 | 637 | 698 | 30 | 60 | 90 |
| Najaf | State | 16640 | 35279 | 51919 | 292848 | 297820 | 590668 |
| | Private | 2217 | 3857 | 6074 | 0 | 0 | 0 |
| Al Qadeseya | State | 18961 | 22947 | 41908 | 158948 | 180454 | 339402 |
| | Private | 1466 | 3395 | 4861 | 0 | 0 | 0 |
| Al Muthana | State | 14091 | 26596 | 40687 | 206108 | 221609 | 427717 |
| | Private | 52 | 173 | 225 | 0 | 0 | 0 |
| Thee Qar | State | 20118 | 30228 | 50346 | 268074 | 281130 | 549204 |
| | Private | 133 | 853 | 968 | 0 | 0 | 0 |
| Misan | State | 15163 | 20708 | 35871 | 143664 | 171820 | 315484 |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 |

| Governorate | Type | INPATIENTS | | | OUTPATIENTS | | Total |
|-------------------------|---------|------------|---------|---------|-------------|---------|---------|
| | | Males | Females | Total | Males | Females | |
| Basra | State | 32682 | 56499 | 89181 | 479020 | 523263 | 1002283 |
| | Private | 2299 | 4614 | 6913 | 6657 | 24375 | 31032 |
| Kurdistan Region | | | | | | | |
| Sulimaneya | State | 43527 | 43527 | 107571 | 145836 | 167671 | 313507 |
| | Private | 1802 | 1802 | 5449 | 3108 | 2816 | 5924 |
| Erbil | State | 22410 | 64044 | 66413 | 213709 | 297104 | 510813 |
| | Private | 4262 | 3647 | 8688 | 8125 | 1061 | 9186 |
| Dhook | State | 27034 | 30190 | 57224 | 155075 | 200676 | 355751 |
| | Private | 1376 | 1914 | 3290 | 2193 | 3365 | 5558 |
| Total | State | 483847 | 707034 | 1190881 | 4718496 | 5253642 | 9972138 |
| | Private | 28621 | 62727 | 91348 | 41300 | 93654 | 134954 |

Table No. (7): Percentage of outpatients and inpatients at State and private hospitals by sex and Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | INPATIENTS | | | Total | OUTPATIENTS | | Total |
|-------------|---------|------------|---------|--------|-------|-------------|---------|-------|
| | | Males | Females | Males | | Females | | |
| Ninawa | State | 28.2 | 71.7 | 105814 | 44.4 | 55.6 | 810593 | |
| | Private | 44.5 | 55.5 | 1105 | 0.0 | 0.0 | 0 | |
| Karkook | State | 50.0 | 50.0 | 39310 | 54.2 | 45.8 | 120120 | |
| | Private | 38.6 | 61.4 | 2067 | 0.0 | 0.0 | 0 | |
| Diala | State | 34.8 | 65.2 | 31381 | 45.8 | 54.2 | 254457 | |
| | Private | 25.8 | 74.2 | 1013 | 40.2 | 59.8 | 1367 | |
| Anbar | State | 44.0 | 56.0 | 64232 | 45.9 | 54.0 | 645732 | |
| | Private | 18.2 | 81.8 | 1100 | 25.0 | 75.0 | 400 | |
| Baghdad | State | 49.8 | 50.2 | 186085 | 51.4 | 48.6 | 1827905 | |
| | Private | 25.2 | 74.8 | 41599 | 25.2 | 74.8 | 81117 | |
| Babel | State | 47.1 | 52.9 | 73452 | 44.6 | 55.4 | 441920 | |
| | Private | 29.3 | 70.7 | 2373 | 0.0 | 0.0 | 0 | |
| Karbala | State | 39.2 | 60.8 | 60985 | 55.5 | 44.5 | 446730 | |
| | Private | 33.7 | 66.3 | 3588 | 35.7 | 64.3 | 280 | |
| Waset | State | 40.1 | 59.9 | 53748 | 38.2 | 61.8 | 573521 | |
| | Private | 62.5 | 37.5 | 1319 | 0.0 | 0.0 | 0 | |
| Saladin | State | 33.7 | 66.3 | 34754 | 47.8 | 52.2 | 446331 | |
| | Private | 8.7 | 91.3 | 698 | 33.3 | 66.7 | 90 | |
| Najaf | State | 32.0 | 68.0 | 51919 | 49.6 | 50.4 | 590668 | |
| | Private | 36.5 | 63.5 | 6074 | 0.0 | 0.0 | 0 | |
| Al Qadeseya | State | 45.2 | 54.8 | 41908 | 46.8 | 52.2 | 339402 | |
| | Private | 30.2 | 69.8 | 4861 | 0.0 | 0.0 | 0 | |
| Al Muthana | State | 34.6 | 65.4 | 40687 | 48.2 | 51.8 | 427717 | |
| | Private | 23.1 | 76.9 | 225 | 0.0 | 0.0 | 0 | |
| Thee Qar | State | 40.0 | 60.0 | 50346 | 48.8 | 51.2 | 549204 | |
| | Private | 13.7 | 86.3 | 968 | 0.0 | 0.0 | 0 | |
| Misan | State | 24.3 | 57.7 | 35871 | 45.5 | 54.5 | 315484 | |
| | Private | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | |

| Governorate | Type | INPATIENTS | | | OUTPATIENTS | | |
|-------------------------|---------|------------|---------|---------|-------------|---------|---------|
| | | Males | Females | Total | Males | Females | Total |
| Basra | State | 36.6 | 63.4 | 89181 | 47.8 | 52.2 | 1002283 |
| | Private | 33.3 | 66.7 | 6913 | 21.5 | 78.5 | 31032 |
| Kurdistan Region | | | | | | | |
| Sulimaneya | State | 40.5 | 59.5 | 107571 | 46.5 | 53.5 | 313507 |
| | Private | 33.1 | 66.9 | 5449 | 25.5 | 47.5 | 5924 |
| Erbil | State | 33.7 | 66.3 | 66413 | 41.8 | 58.2 | 510813 |
| | Private | 49.1 | 50.9 | 8688 | 88.4 | 11.6 | 9186 |
| Dhook | State | 47.2 | 52.8 | 57224 | 43.6 | 56.4 | 355751 |
| | Private | 41.8 | 58.2 | 3290 | 39.5 | 60.5 | 5558 |
| Total | State | 40.6 | 59.4 | 1190881 | 47.3 | 52.7 | 9972138 |
| | Private | 31.3 | 68.7 | 91348 | 30.6 | 69.4 | 134954 |

Table No. (8): Percentage of bed occupancy by inpatients in State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type of hospital | No. of in hospital days of inpatients | No. of beds equipped for inpatients | Bed occupancy rate % |
|--------------------|-------------------------|--|--|-----------------------------|
| Ninawa | State | 247081 | 3006 | 45.2 |
| | Private | 4439 | 116 | 21.0 |
| Karkook | State | 83127 | 1180 | 38.7 |
| | Private | 5076 | 56 | 49.8 |
| Diala | State | 63035 | 977 | 32.5 |
| | Private | 1991 | 54 | 20.3 |
| Anbar | State | 130400 | 1245 | 57.5 |
| | Private | 2000 | 24 | 45.8 |
| Baghdad | State | 709068 | 9367 | 41.6 |
| | Private | 54505 | 1108 | 27.0 |
| Babel | State | 180472 | 1254 | 79.1 |
| | Private | 3843 | 60 | 35.2 |
| Karbala | State | 87768 | 876 | 55.1 |
| | Private | 8720 | 67 | 71.5 |
| Waset | State | 105098 | 1357 | 42.6 |
| | Private | 2628 | 50 | 72.2 |
| Saladin | State | 104892 | 1338 | 43.1 |
| | Private | 1283 | 25 | 28.2 |
| Najaf | State | 133619 | 1009 | 72.8 |
| | Private | 8994 | 29 | 53.7 |
| Al Qadeseya | State | 114028 | 985 | 63.6 |
| | Private | 5237 | 43 | 66.9 |
| Al Muthana | State | 88204 | 863 | 56.2 |
| | Private | 1279 | 20 | 35.1 |
| Thee Qar | State | 101536 | 976 | 57.2 |
| | Private | 1468 | 20 | 40.3 |
| Misan | State | 92656 | 1036 | 49.1 |
| | Private | 0 | 0 | 0.0 |

| Governorate | Type of hospital | No. of in hospital days of inpatients | No. of beds equipped for inpatients | Bed occupancy rate % |
|-------------------------|------------------|---------------------------------------|-------------------------------------|----------------------|
| Basra | State | 252023 | 2938 | 47.1 |
| | Private | 10287 | 180 | 31.4 |
| Kurdistan Region | | | | |
| Sulimaneya | State | 217530 | 1988 | 60.1 |
| | Private | 7785 | 138 | 31.0 |
| Erbil | State | 224005 | 2201 | 55.9 |
| | Private | 18395 | 140 | 72.2 |
| Dhook | State | 120876 | 1095 | 60.7 |
| | Private | 3208 | 66 | 26.7 |
| Total | State | 3055418 | 33691 | 49.8 |
| | Private | 141138 | 2229 | 34.8 |

$$\text{Bed occupancy rate} = \frac{\text{No. of in hospital care days of all patients for 6 months}}{\text{No. of beds equipped for inpatients} \times 182}$$

Table No. (9): No. of outpatients at other health facilities (except hospitals by Governorate: 01/01/2008 – 30/06/2008

| Governorate | Central H. Labs. | General H. center | Chest D. clinic | Specialty Dental center | Allergic D. & Asthma center | Specialty H. center | Forensic Medicine | Blood Bank | Total |
|---------------------|-------------------------|--------------------------|------------------------|--------------------------------|--|----------------------------|--------------------------|-------------------|--------------|
| Ninawa | 42000 | 750744 | 934 | 28466 | 0 | 14709 | 4200 | 27000 | 868053 |
| Karkook | 5400 | 281571 | 2057 | 5280 | 6700 | 0 | 874 | 7200 | 309082 |
| Diala | 8723 | 126374 | 1607 | 3072 | 0 | 0 | 3500 | 4509 | 147785 |
| Anbar | 12933 | 273347 | 4950 | 10600 | 0 | 0 | 4110 | 3426 | 309366 |
| Baghdad | 96703 | 2372821 | 2400 | 95053 | 21161 | 197705 | 1478 | 70056 | 2857377 |
| Babel | 51000 | 548094 | 13695 | 6495 | 10495 | 0 | 626 | 10406 | 640751 |
| Karbala | 16363 | 420786 | 3525 | 17241 | 0 | 0 | 525 | 15000 | 473440 |
| Waset | 15006 | 236680 | 6265 | 2549 | 0 | 0 | 684 | 2738 | 263922 |
| Saladin | 25967 | 321193 | 6325 | 6397 | 0 | 0 | 280 | 3630 | 363792 |
| Najaf | 79050 | 425389 | 2914 | 13049 | 0 | 0 | 300 | 12000 | 532702 |
| Qadeseya | 6214 | 587515 | 6565 | 6000 | 0 | 0 | 133 | 9800 | 616227 |
| Muthana | 41357 | 183413 | 4404 | 8655 | 6495 | 0 | 224 | 4210 | 248758 |
| Thee Qar | 19350 | 517689 | 2769 | 11249 | 0 | 0 | 525 | 6555 | 558137 |
| Misan | 48237 | 390242 | 861 | 12421 | 0 | 799 | 316 | 4221 | 457097 |
| Basra | 17423 | 502308 | 3544 | 8385 | 1880 | 0 | 138 | 4623 | 538301 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 71610 | 631455 | 3600 | 21319 | 15360 | 89966 | 163 | 14000 | 847473 |
| Erbil | 13200 | 357008 | 9000 | 27360 | 0 | 9341 | 0 | 0 | 415909 |
| Dhook | 16176 | 426365 | 0 | 0 | 0 | 44338 | 339 | 9000 | 496218 |
| Total | 586712 | 9532994 | 75415 | 283531 | 62091 | 356858 | 18415 | 208374 | 10944390 |

Table No. (10): Amounts of commodities requirements provided at State and private hospitals and other health facilities by Governorate :

01/01/2008 – 30/06/2008

| Governorate | Masks | Gloves | Cotton | Gauze | Dressing items | Towel | Nutrient infusion | Distilled water bottle | Blades | Disposable syringes | Knives |
|---------------------|--------------|---------------|---------------|--------------|-----------------------|--------------|--------------------------|-------------------------------|---------------|----------------------------|---------------|
| | No. | No. | Kg. | Meter | Kg. | No. | No. | No. | No | No. | No. |
| Ninawa | 46300 | 502588 | 32961.5 | 658527 | 541 | 3091 | 275929 | 229766 | 53476 | 1531375 | 82 |
| Karkook | 16822 | 76909 | 5632 | 132080 | 30 | 148 | 41778 | 105600 | 16413 | 657503 | 150 |
| Diala | 25650 | 88137 | 1639 | 55696 | 0 | 1162 | 27322 | 26579 | 13717 | 292323 | 590 |
| Anbar | 50371 | 171608 | 4360 | 210870 | 0 | 826 | 353617 | 697466 | 88490 | 974614 | 348 |
| Baghdad | 290100 | 1500953 | 19083 | 771047 | 40409 | 20555 | 616516 | 200653 | 292476 | 4523506 | 3269 |
| Babel | 49816 | 1402706 | 3206 | 189793 | 25 | 6440 | 250924 | 245762 | 27518 | 1310147 | 118 |
| Karbala | 87590 | 171680 | 9895 | 130461 | 0 | 200 | 3026449 | 274750 | 34401 | 2600036 | 5 |
| Waset | 10203 | 1500953 | 1612 | 107772 | 180 | 19 | 49848 | 61078 | 32199 | 1032825 | 27507 |
| Saladin | 31074 | 1402706 | 1955 | 95415 | 0 | 0 | 192234 | 314332 | 51493 | 593112 | 0 |
| Najaf | 52621 | 133780 | 3393 | 226566 | 600 | 305 | 174072 | 402812 | 68107 | 1224866 | 16 |
| Al Qadeseya | 37370 | 220460 | 20176 | 255648 | 0 | 289 | 248201 | 502953 | 42842 | 1101330 | 0 |
| Al Muthana | 15755 | 301058 | 996 | 150241 | 885 | 124 | 98828 | 178984 | 10657 | 686645 | 237 |
| Thee Qar | 24795 | 226810 | 14703 | 294556 | 0 | 270 | 85195 | 415653 | 319029 | 1672194.8 | 0 |
| Misan | 14980 | 178423 | 1992 | 177131 | 50 | 350 | 139042 | 554019 | 21411 | 1240590 | 18 |
| Basra | 324455 | 120320 | 11419 | 540283 | 0 | 432 | 563372 | 477705 | 146354 | 2598294 | 1500 |
| Kurdistan R. | | | | | | | | | | | |
| Sulimaneya | 112642 | 831963 | 8789.7 | 292678 | 102 | 12103 | 286921 | 333257 | 38466 | 1051649 | 34255 |
| Erbil | 192880 | 998770 | 63818 | 372950 | 4992 | 1177 | 183019 | 825893 | 230141 | 5807237 | 5000 |
| Dhook | 59360 | 444208 | 34953.5 | 403689 | 16240 | 1239 | 201458 | 357670 | 46433 | 1065321 | 1720 |
| Total | 1443144 | 8185149 | 209125.7 | 5065430 | 64054 | 48742 | 6812625 | 6204932 | 1569623 | 29963567.8 | 74815 |

Table No. (10): Amounts of commodities requirements provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 -30/6/2008 (Cont'd)

| Governorate | Saw | Nails | Blood bags | Living human organs (transplant) | Prosthetic human organs (transplants) | Prosthetic dental Parts | Dental Fillings | Lab. & medical requirements (Plastic) | Lab. & medical requirements (Glass) | Blood cell Separator |
|---------------------|-------------|--------------|---------------|----------------------------------|---------------------------------------|-------------------------|------------------|---------------------------------------|-------------------------------------|----------------------|
| | No. | No. | No. | No. | No. | No. | Gram. | No. | No. | No. |
| Ninawa | 39 | 301 | 29459 | 0 | 0 | 912 | 18872 | 439848 | 175816 | 670 |
| Karkook | 0 | 0 | 9571 | 0 | 0 | 1000 | 6617 | 53095 | 9775 | 2 |
| Diala | 0 | 120 | 5308 | 0 | 0 | 0 | 16000 | 271942 | 26636 | 2 |
| Anbar | 210 | 8368 | 18380 | 0 | 0 | 193 | 27872 | 320645 | 56447 | 14 |
| Baghdad | 639 | 23282 | 69750 | 0 | 0 | 26310 | 126553 | 1074754 | 477132 | 1801 |
| Babel | 31 | 15483 | 16246 | 0 | 0 | 30 | 5376 | 545174 | 62280 | 965 |
| Karbala | 5 | 5850 | 16130 | 0 | 0 | 886 | 39135 | 159862 | 48315 | 21 |
| Waset | 417 | 730 | 8996 | 0 | 0 | 425 | 22474 | 73617 | 54710 | 6 |
| Saladin | 200 | 0 | 6575 | 0 | 0 | 300 | 5975 | 692332 | 60235 | 23 |
| Najaf | 5 | 0 | 1200 | 0 | 0 | 1000 | 1870 | 403023 | 76684 | 102 |
| Al Qadeseya | 9146 | 362 | 8406 | 0 | 0 | 96 | 49837 | 302286 | 191319 | 36 |
| Al Muthana | 146 | 0 | 333 | 0 | 0 | 54 | 6040 | 73762 | 27301 | 32 |
| Thee Qar | 0 | 0 | 13010 | 0 | 0 | 90 | 4174 | 133317 | 112305 | 11 |
| Misan | 11 | 1120 | 5551 | 0 | 0 | 143 | 8844 | 95629 | 30983 | 1 |
| Basra | 66 | 3684 | 25175 | 0 | 0 | 182 | 17425 | 269257 | 40776 | 0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 4647 | 9050 | 22753 | 0 | 0 | 571 | 315849 | 95526 | 24635 | 294 |
| Erbil | 644 | 8440 | 18057 | 17 | 172 | 5 | 492002 | 221686 | 68067 | 21 |
| Dhook | 417 | 1718 | 13819 | 0 | 0 | 30 | 17031.4 | 505132 | 352060 | 50 |
| Total | 7486 | 78508 | 288737 | 17 | 172 | 32227 | 1181946.4 | 5730878 | 1895521 | 7018 |

Table No. (10): Amounts of commodities requirements provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/6/2008

| Governorate | Renal dialysis Equipment | X-Ray Equipment | X-Ray Films | Dental X-Ray films | Radiation Protection Leaded aprons | Fabric aprons | Bed and operation Covers | Pillows | Blankets | swabs |
|--------------|--------------------------|-----------------|----------------|--------------------|------------------------------------|---------------|--------------------------|--------------|--------------|---------------|
| Ninawa | 0 | 103 | 173838 | 4991 | 42 | 4218 | 4701 | 2334 | 3701 | 7276 |
| Karkook | 0 | 20 | 36780 | 760 | 6 | 2340 | 1440 | 837 | 1094 | 2690 |
| Diala | 0 | 31 | 35847 | 280 | 6 | 2093 | 3628 | 1959 | 3095 | 1393 |
| Anbar | 0 | 39 | 107526 | 4152 | 21 | 2424 | 3618 | 1578 | 1954 | 27077 |
| Baghdad | 28809 | 222 | 494215 | 10397 | 149 | 23764 | 35892 | 9909 | 11392 | 51531 |
| Babel | 1 | 36 | 146648 | 823 | 18 | 6952 | 10532 | 1314 | 1640 | 6385 |
| Karbala | 360 | 23 | 22576 | 170 | 40 | 2434 | 3609 | 1087 | 1466 | 79495 |
| Waset | 12 | 27 | 27100 | 1568 | 13 | 1059 | 3662 | 372 | 854 | 1706 |
| Saladin | 0 | 27 | 81203 | 50 | 9 | 729 | 1600 | 865 | 1193 | 12847 |
| Najaf | 120 | 33 | 35450 | 2507 | 80 | 3329 | 5212 | 2111 | 1232 | 5705 |
| Al Qadeseya | 9 | 39 | 52523 | 1900 | 15 | 4664 | 15462 | 1599 | 1766 | 1898 |
| Al Muthana | 25 | | 39150 | 464 | 0 | 26 | 4066 | 1111 | 764 | 1470 |
| Thee Qar | 0 | 35 | 63579 | 686 | 24 | 1866 | 152 | 354 | 560 | 16578 |
| Misan | 0 | 29 | 56617 | 715 | 9 | 381 | 1746 | 533 | 279 | 6563 |
| Basra | 10 | 67 | 109222 | 15703 | 53 | 4709 | 35088 | 2617 | 3401 | 95552 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 2 | 40 | 115795 | 6410 | 53 | 3007 | 13430 | 3925 | 4640 | 889 |
| Erbil | 3390 | 80 | 121374 | 1838 | 62 | 6839 | 9592 | 4208 | 4120 | 14371 |
| Dhook | 1704 | 21 | 97292 | 756 | 26 | 1138 | 13161 | 647 | 1946 | 60537 |
| Total | 34442 | 872 | 1831735 | 54270 | 626 | 71972 | 166591 | 37360 | 45079 | 393963 |

**Table No. (10 Amounts of commodities requirements provided at State and private hospitals and other health facilities by Governorate:
01/01/2008 – 30/06/2008 (Cont'd)**

| Governorate | Plaster Meter | Gypsum plaster meter | ELISA No. | Medical bandage Roll | Bandage No. | Urine bag No. | Urinary sound No. | Infusion set No. | Lancet No. | Wooden sticks No. |
|---------------------|----------------------|-----------------------------|------------------|-----------------------------|--------------------|----------------------|--------------------------|-------------------------|-------------------|--------------------------|
| Ninawa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karkook | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diala | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anbar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Baghdad | 39 | 198 | 511 | 11765 | 7004 | 875 | 0 | 38084 | 200 | 0 |
| Babel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karbala | 0 | 0 | 0 | 1070 | 2313 | 3975 | 4270 | 26800 | 4800 | 12000 |
| Waset | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Saladin | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3630 | 0 |
| Najaf | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Qadeseya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Muthana | 68999 | 5685 | 19600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Thee Qar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Basra | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Erbil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 |
| Dhook | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 69058 | 5883 | 20111 | 12835 | 9317 | 4850 | 4270 | 64884 | 8730 | 12000 |

**Table No. (10 Amounts of commodities requirements provided at State and private hospitals and other health facilities by Governorate:
01/01/2008 – 30/06/2008 (Cont'd)**

| Governorate | Surgical set Dozen | Laparatomy set Dozen | Surgical suture No. | Plaster No. | Nylon threads roll | Cadaver bags No. | Spatula No. | Rubber No. | Metal wire No. | Cannula No. |
|--------------------|---------------------------|-----------------------------|----------------------------|--------------------|---------------------------|-------------------------|--------------------|-------------------|-----------------------|--------------------|
| Ninawa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karkook | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diala | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anbar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Baghdad | 0 | 0 | 11123 | 2769 | 0 | 0 | 28300 | 13400 | 1040 | 17043 |
| Babel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karbala | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waset | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Saladin | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Najaf | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Qadeseya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Muthana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Thee Qar | 0 | 0 | 0 | 117 | 300 | 16 | 0 | 0 | 0 | 0 |
| Misan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Basra | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Erbil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dhook | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 14 | 3 | 11323 | 2914 | 300 | 16 | 28300 | 13400 | 1040 | 17043 |

Table No. (10): Amounts of commodities requirements provided at State and private hospitals and other health facilities by Governorate: 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Tongue Depressor Packet | Thermometer No. | Electro Cardiogram No. | Screens No. | Disposal Boxes No. | Gypsum Plaster No. | Angio tube No. | Baby diapers No. | Umbilical cord clamp No. |
|--------------|-------------------------------|--------------------|------------------------------|----------------|--------------------------|--------------------------|-------------------|---------------------|--------------------------------|
| Ninawa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karkook | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diala | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anbar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Baghdad | 5 | 14 | 1 | 60 | 50 | 7096 | 3000 | 1000 | 0 |
| Babel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karbala | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waset | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Saladin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1800 |
| Najaf | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Qadeseya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Muthana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Thee Qar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Basra | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Erbil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dhook | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5 | 14 | 1 | 60 | 50 | 7096 | 3000 | 1000 | 1800 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/06/2008

| Governorate | Mudes | Refrigerants | Refrigerants | Acrylic | Acrylic | Alloy | Amalgam | Loffler's | Omnipage | Procteron | Prolation | Strong | Ethyl |
|---------------------|--------------|---------------------|---------------------|----------------|----------------|--------------|----------------|------------------|-----------------|------------------|------------------|---------------|--------------|
| | liter | Kg. | Bottle | liter | Kg. | Kg. | No. | liter | liter | CC | CC | liter | liter |
| Ninawa | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 1502.5 | 0.0 |
| Karkook | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 |
| Diala | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 |
| Anbar | 0.0 | 390.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 3.5 | 0.0 | 0.0 | 1.1 | 1.0 |
| Baghdad | 0.0 | 0.0 | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.3 | 0.0 | 0.0 | 0.0 | 41.3 | 4.0 |
| Babel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 | 0.0 | 0.0 | 0.0 | 5.0 | 0.0 |
| Karbala | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 |
| Saladin | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55.0 | 0.0 |
| Najaf | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0 |
| Al Qadeseya | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 0.0 | 0.0 | 0.0 | 5.0 | 4.0 | 3.5 | 4.0 | 0.0 | 0.0 | 120.0 | 360.0 | 0.0 | 0.0 |
| Thee Qar | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 |
| Basra | 10.0 | 180.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.2 | 0.0 |
| Erbil | 0.0 | 390.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 56.0 | 0.0 | 0.0 | 0.0 | 51.0 | 0.0 |
| Dhook | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 17.0 | 960.0 | 15.0 | 5.0 | 4.0 | 3.5 | 4.0 | 95.7 | 3.5 | 120.0 | 360.0 | 1727.1 | 25.0 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/6/2008 (Cont'd)

| Governorate | Acetone liter | Oxyten liter | Albumen liter | Xylol liter | Xylene liter | Silver Gm | Formaldehyde liter | Phenol liter | Chloroform liter | Methanol liter | Hydro Cortison liter | N fluorine Liter | Nitros Oxide bottle |
|---------------------|--------------------------|-------------------------|--------------------------|------------------------|-------------------------|----------------------|-------------------------------|-------------------------|-----------------------------|---------------------------|-------------------------------------|-----------------------------|------------------------------------|
| Ninawa | 9 | 0.0 | 0.0 | 647.6 | 79.0 | 0.0 | 144.0 | 0.0 | 1.0 | 63.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 10.5 | 0.0 | 0.0 | 108.6 | 6.0 | 0.0 | 23.0 | 0.0 | 0.0 | 26.0 | 0.0 | 0.0 | 6.0 |
| Diala | 2.0 | 0.0 | 0.0 | 23.0 | 108.2 | 0.0 | 231.0 | 0.0 | 0.0 | 80.1 | 0.0 | 0.0 | 0.0 |
| Anbar | 14.0 | 0.0 | 0.0 | 90.0 | 82.0 | 10.0 | 713.5 | 2.0 | 1.0 | 33.0 | 0.5 | 0.0 | 6070 |
| Baghdad | 99.3 | 0.0 | 3.0 | 1332.6 | 1622.7 | 0.5 | 1042.0 | 3.6 | 34.0 | 575.8 | 0.0 | 0.0 | 160 |
| Babel | 1.0 | 0.0 | 0.0 | 9.5 | 36.0 | 250.0 | 180.1 | 0.0 | 0.0 | 10.0 | 70.0 | 0.0 | 4320 |
| Karbala | 0.0 | 0.0 | 0.0 | 0.4 | 12.0 | 0.0 | 118.0 | 0.0 | 4.6 | 14.0 | 0.0 | 0.0 | 1.0 |
| Waset | 0.0 | 270.0 | 0.0 | 252.6 | 51.5 | 0.0 | 250.0 | 0.0 | 0.0 | 16.2 | 0.0 | 0.0 | 0.0 |
| Saladin | 3.5 | 0.0 | 0.0 | 9.1 | 3.5 | 0.0 | 10.0 | 0.0 | 0.0 | 28.2 | 0.0 | 0.0 | 0.0 |
| Najaf | 13.0 | 0.0 | 0.0 | 52.3 | 4.8 | 600.0 | 130.0 | 0.0 | 30.0 | 87.2 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 360.1 | 0.0 | 0.0 | 4.6 | 0.3 | 0.0 | 525.1 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 10.5 | 0.0 | 0.0 | 181.5 | 60.0 | 84.0 | 115.0 | 0.1 | 8.8 | 45.0 | 0.0 | 0.0 | 0.0 |
| Misan | 301.2 | 0.0 | 0.0 | 264.3 | 10.0 | 0.0 | 42.0 | 0.0 | 1.0 | 5.0 | 0.0 | 0.0 | 2.0 |
| Basra | 0.0 | 20.0 | 0.0 | 114.0 | 255.0 | 0.0 | 963.0 | 8.0 | 5.0 | 290.0 | 0.0 | 20.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 2.0 | 0.0 | 0.0 | 30.0 | 372.0 | 100.0 | 711.0 | 10.0 | 9.0 | 22.0 | 25.0 | 0.0 | 0.0 |
| Erbil | 113.0 | 0.0 | 0.0 | 77.2 | 31.0 | 3000.0 | 610.0 | 6.0 | 3.0 | 616.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 393.0 | 0.0 | 0.0 | 569.0 | 0.0 | 0.0 | 0.0 |
| Total | 937.1 | 290.0 | 3.0 | 3197.3 | 2752.0 | 4144.5 | 6201.1 | 29.7 | 97.1 | 2482.6 | 95.5 | 20.0 | 10559 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/6/2008 (Cont'd)

| Governorate | Ethanol liter | Ether liter | Iso - propanol liter | Iso - flurane liter | Iso - flurane box | Iodine liter | Barium Kg. | Sodium Bisulphate Gm | Hexatin liter | Potassium Permanganate Gm | Primarin box | Oxalate Violet crystals liter | Pentothal ampoule |
|--------------|------------------|----------------|----------------------------|---------------------------|-------------------------|-----------------|---------------|----------------------------|------------------|---------------------------------|-----------------|--|----------------------|
| Ninawa | 313.0 | 0.0 | 0.0 | 240.0 | 166.0 | 3549.2 | 0.0 | 0.0 | 6211.8 | 0.0 | 0.0 | 0.8 | 0.0 |
| Karkook | 19.0 | 0.0 | 0.0 | 0.0 | 0.0 | 369.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 110.0 | 0.0 | 70.0 | 0.0 | 0.0 | 12.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 |
| Anbar | 173.0 | 0.0 | 6.0 | 62.0 | 0.0 | 2170.0 | 15.0 | 0.0 | 0.0 | 1000.0 | 0.0 | 0.1 | 20.0 |
| Baghdad | 980.6 | 0.0 | 519.0 | 86.0 | 25.0 | 12957 | 0.0 | 0.0 | 2514.0 | 2000.0 | 0.0 | 3.4 | 0.0 |
| Babel | 26.0 | 0.0 | 0.0 | 2.0 | 0.0 | 7050.0 | 0.0 | 0.0 | 114.0 | 0.0 | 13.0 | 2.0 | 0.0 |
| Karbala | 1540.8 | 0.0 | 0.0 | 0.0 | 0.0 | 2598.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2758.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 17.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1109.0 | 0.0 | 500.0 | 0.0 | 500.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 173.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7099.0 | 0.0 | 0.0 | 100.0 | 10.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 3299.1 | 0.0 | 0.0 | 1730.0 | 1000.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 949.0 | 0.0 | 0.0 | 1345.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 75.3 | 2.0 | 0.0 | 0.0 | 0.0 | 2086.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 43.6 | 0.0 | 0.0 | 0.0 | 950.0 | 2498.0 | 0.0 | 0.0 | 200.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Basra | 209.0 | 0.0 | 0.0 | 76.0 | 0.0 | 5232.0 | 0.0 | 0.0 | 720.0 | 2000.0 | 0.0 | 6.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 328.1 | 0.0 | 0.0 | 0.0 | 268.0 | 4782.5 | 0.0 | 0.0 | 0.0 | 1000.0 | 0.0 | 0.0 | 0.00.0 |
| Erbil | 494.0 | 0.0 | 0.0 | 0.0 | 36.0 | 4323.0 | 0.0 | 0.0 | 60.0 | 8900.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5553.0 | 26.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Total | 4506.9 | 2.0 | 602.0 | 466.0 | 1445.0 | 68395.4 | 41.0 | 500.0 | 13021.8 | 16410.0 | 13.0 | 13.6 | 20.0 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/6/2008 (Cont'd)

| Governorate | Hibitane Liter | Povilon Liter | Betadin Liter | Perchlor Ethylene liter | Detergent Box | Reagent Typhoid Test No. | Reagent Dibetes Test No. | Reagent Cholesterol Test No. | Reagent Urea Test No. | Reagent Brucellosid Test No | Toluene Liter | Potassium Hydroxide Liter | Gypsum liter |
|--------------|-------------------|------------------|------------------|-------------------------------|------------------|-----------------------------------|-----------------------------------|---------------------------------------|--------------------------------|--------------------------------------|------------------|---------------------------------|-----------------|
| Ninawa | 294.0 | 1.0 | 0.0 | 15.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 2260.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 |
| Diala | 1085.0 | 0.0 | 575.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 2755.0 | 0.0 | 900.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 0.5 | 0.0 |
| Baghdad | 5085.0 | 456.0 | 0.0 | 0.0 | 0.0 | 3.0 | 560.0 | 200.0 | 200.0 | 0.0 | 50.5 | 1.3 | 25.0 |
| Babel | 12.0 | 1844.0 | 0.0 | 0.0 | 2100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 6069.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 570.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 |
| Saladin | 1285.0 | 0.0 | 0.0 | 0.0 | 0.0 | 241.0 | 4.0 | 2.0 | 1.0 | 282.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3500.5 | 0.0 |
| Al Qadeseya | 65827.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 640.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 378.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 4574.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 500.5 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.5 | 0.0 |
| Erbil | 705.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 0.0 |
| Dhook | 615.0 | 0.0 | 0.0 | 0.0 | 600.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 92262.0 | 2301.0 | 1485.0 | 15.5 | 2700.0 | 244.0 | 564.0 | 202.0 | 201.0 | 282.0 | 56.5 | 4046.5 | 25.0 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/6/2008 (Cont'd)

| Governorate | Sonar Gel liter | Acetic Acid liter | Sulphuric Acid Liter | Chromic Acid Liter | Glutaric Acid Liter | Nitric Acid liter | Hydrochloric Acid liter | Uric Acid liter | Potassium Dichromate Gm. | Drathene liter | Dryken / Cyanide Solution liter | Developer liter | Methyl Orange Indicator MI |
|--------------|--------------------|----------------------|-------------------------|-----------------------|------------------------|----------------------|----------------------------|--------------------|-----------------------------|-------------------|------------------------------------|--------------------|-------------------------------|
| Ninawa | 0.0 | 0.2 | 0.9 | 0.0 | 0.0 | 3.0 | 1269.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0.0 | 11.0 | 4.5 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 96 | 0.0 |
| Anbar | 327.0 | 17.3 | 202.2 | 0.0 | 0.0 | 4.0 | 366.0 | 0.0 | 1000 | 0.0 | 0.0 | 1840 | 0.0 |
| Baghdad | 1391.0 | 288.0 | 78.7 | 1.0 | 0.0 | 3.0 | 552.0 | 0.0 | 0.0 | 0.0 | 2.0 | 245 | 0.0 |
| Babel | 0.0 | 120.0 | 4.0 | 0.0 | 0.0 | 1.0 | 109.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0.0 | 0.6 | 0.9 | 0.0 | 0.0 | 0.5 | 109.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 0.0 | 62.3 | 0.4 | 0.0 | 2.0 | 0.0 | 79.8 | 0.0 | 250 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0.0 | 2.6 | 3.5 | 0.0 | 0.0 | 2.5 | 7.0 | 1.0 | 500 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0.0 | 6.2 | 11.0 | 0.0 | 0.0 | 2.0 | 20.3 | 0.0 | 250 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 0.0 | 1.0 | 0.0 | 0.0 | 600 | 0.0 | 1517.7 | 0.0 | 0.0 | 0.0 | 0.0 | 200 | 0.0 |
| Al Muthana | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 92 | 0.0 |
| Thee Qar | 0.0 | 4500 | 3.0 | 0.0 | 0.0 | 0.0 | 12.0 | 0.0 | 0.0 | 8.7 | 0.0 | 0.0 | 250 |
| Misan | 0.0 | 2.0 | 104.0 | 0.0 | 0.0 | 0.0 | 11.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 0.0 | 4.0 | 212.5 | 0.0 | 0.0 | 2.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimanya | 0.0 | 104.4 | 36.5 | 0.0 | 0.0 | 1.5 | 15.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 0.0 | 256 | 13.0 | 0.0 | 0.0 | 5.0 | 24.3 | 0.0 | 2000 | 0.0 | 0.0 | 120 | 0.0 |
| Dhook | 0.0 | 0.0 | 25.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 120 | 0.0 |
| Total | 1718.0 | 5375.5 | 702.4 | 1.0 | 604.0 | 24.5 | 41111.1 | 1.0 | 4000 | 8.7 | 2.0 | 2713 | 250 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/6/2008

| Governorate | Dittol Liter | Mercury Liter | Liquid detergent Liter | Xylocaine Liter | Safranin Liter | Savlon Liter | Saviton Liter | Sodium hydroxide Liter | Sandex Liter | Septol Liter | Spirit Liter | Cetavlon Liter | Sodium citrate Liter |
|--------------|-----------------|------------------|------------------------------|--------------------|-------------------|-----------------|------------------|------------------------------|-----------------|-----------------|-----------------|-------------------|----------------------------|
| Ninawa | 7317.5 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 643.2 | 60.0 | 0.0 |
| Karkook | 4551.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 319.0 | 0.0 | 0.0 |
| Diala | 775.0 | 0.0 | 0.0 | 0.0 | 0.0 | 250.0 | 0.0 | 13.1 | 0.0 | 0.0 | 18.0 | 0.0 | 0.0 |
| Anbar | 6718.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 2.7 | 730.0 | 0.0 | 1984.0 | 0.0 | 0.0 |
| Baghdad | 15240.0 | 1.0 | 980.0 | 400.0 | 723.4 | 472.0 | 0.0 | 45.6 | 105.0 | 0.0 | 5761.0 | 12.2 | 1.0 |
| Babel | 9380.0 | 0.0 | 230.0 | 0.0 | 27.0 | 0.0 | 0.0 | 16.4 | 0.0 | 0.0 | 333.0 | 0.0 | 0.0 |
| Karbala | 1554.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 15.3 | 0.0 | 0.0 | 234.0 | 0.0 | 0.0 |
| Waset | 3820.0 | 0.0 | 540.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 243.0 | 0.0 | 0.0 |
| Saladin | 1835.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 5440.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 | 0.0 | 0.0 | 1214.0 | 0.0 | 0.0 |
| Al Qadeseya | 1350.3 | 0.0 | 0.0 | 0.0 | 2.0 | 5.0 | 0.0 | 0.5 | 0.0 | 25.0 | 447.0 | 0.0 | 0.0 |
| Al Muthana | 388.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 255.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 1460.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 46.0 | 0.0 | 0.0 |
| Misan | 439.0 | 0.0 | 0.0 | 0.0 | 20.0 | 0.0 | 0.0 | 3.9 | 0.0 | 0.0 | 103.0 | 0.0 | 0.0 |
| Basra | 3328.0 | 0.0 | 0.0 | 0.0 | 5.0 | 40.0 | 25.0 | 706.5 | 180.0 | 0.0 | 198.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 5839.0 | 0.0 | 0.0 | 0.0 | 191.0 | 0.0 | 0.0 | 105.0 | 0.0 | 0.0 | 2001. | 0.0 | 0.0 |
| Erbil | 24018.0 | 0.0 | 0.0 | 0.0 | 451.0 | 0.0 | 0.0 | 20.4 | 0.0 | 0.0 | 1579.0 | 0.0 | 0.0 |
| Dhook | 7882.0 | 0.0 | 294.0 | 0.0 | 375.0 | 0.0 | 20.0 | 2.0 | 0.0 | 0.0 | 1206.0 | 0.0 | 0.0 |
| Total | 101334.8 | 1.0 | 2044.0 | 400.0 | 1908.8 | 767.0 | 45.0 | 1125.9 | 1015.0 | 280.0 | 16329.2 | 72.2 | 1.0 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/06/2008 (Cont'd)

| Governorate | Scoline Ampoule | Sodium sulfate | Surgical soap | Hematoxin | Malaria stain | Blood group material | Sodium bisulfate | sodium citrate | CO2 gas | CO2 gas | N2 gas | O2 gas | Hepatitis reagent |
|--------------|-----------------|----------------|---------------|-----------|---------------|----------------------|------------------|----------------|---------|---------|----------|----------|-------------------|
| | ampoule | ml | Liter | Liter | ml | No. | Gm. | ml | Bottle | Kg. | Cylinder | Cylinder | cc |
| Ninawa | 0.0 | 250.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0.0 | 0.0 | 30.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3349.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 0.0 | 0.0 | 1575.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65.0 | 0.0 | 20.0 | 0.0 |
| Baghdad | 50.0 | 0.0 | 287.0 | 3.0 | 0.0 | 3.0 | 0.0 | 18250.0 | 9.0 | 0.0 | 138.0 | 6793.0 | 0.0 |
| Babel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0.0 | 0.0 | 180.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.0 | 0.0 | 0.0 | 360.0 | 0.0 |
| Waset | 0.0 | 1500.0 | 0.0 | 0.0 | 0.0 | 188.0 | 0.0 | 0.0 | 0.0 | 300.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0.0 | 1500.0 | 0.0 | 0.0 | 60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0.0 | 250.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 0.0 | 0.0 | 210.0 | 0.0 | 0.0 | 0.0 | 0.0 | 720.0 | 0.0 | 2500.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 380.0 |
| Thee Qar | 0.0 | 0.0 | 5878.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0 | 0.0 | 0.0 | 0.0 |
| Misan | 0.0 | 500.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 530.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 12.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 0.0 | 4000.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 181.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 900.0 | 0.0 | 103.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.0 | 20.0 | 39.0 | 0.0 | 0.0 | 0.0 |
| Total | 50.0 | 8000.0 | 8170.0 | 3.0 | 60.0 | 191.0 | 100.0 | 20427.0 | 3472.0 | 3208.0 | 138.0 | 7173.0 | 380.0 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/06/2008 (Cont'd)

| Governorate | Fertility LH reagents cc | HIV Reagent cc | T3 T4 Reagent cc | TSH Reagent cc | HCG Reagent cc | Fixer Liter | Flash Liter | Fluthane Liter | Fluroclisnol Gm. | Formalin Liter | VIDRL Syphilis ml | Phenophthalin Gm. | Kaser Liter |
|--------------|-----------------------------|-------------------|---------------------|-------------------|-------------------|----------------|----------------|-------------------|---------------------|-------------------|----------------------|----------------------|----------------|
| Ninawa | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.1 | 0.0 | 0.0 | 0.0 |
| Karkook | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 480.0 | 0.0 | 0.0 | 216.0 |
| Diala | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 54.0 | 0.0 | 0.0 | 0.0 | 300.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1840.0 | 0.0 | 0.0 | 0.0 | 505.1 | 0.0 | 0.0 | 0.0 |
| Baghdad | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 417.0 | 0.0 | 4.0 | 0.0 | 0.0 | 5.0 | 0.0 | 11084.0 |
| Babel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 700.0 |
| Karbala | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0.0 | 0.0 | 0.0 | 0.0 | 1044.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 200.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 360.0 | 1200.0 | 240.0 | 120.0 | 120.0 | 32.0 | 0.0 | 0.0 | 0.0 | 25.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 | 0.0 | 0.0 | 250.0 | 25.0 |
| Misan | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 700.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0.0 | 0.0 | 0.0 | 0.0 | 90.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2440.0 |
| Total | 360.0 | 1210.0 | 240.0 | 120.0 | 1260.0 | 2543.0 | 150.0 | 4.0 | 5.0 | 2057.2 | 5.0 | 250.0 | 14465.0 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/06/2008 (Cont'd)

| Governorate | Carbol Liter | Copper sulfate Liter | Ketlotacin Liter | Glutaraldehyde Liter | Glumide Liter | Glutoside Liter | Chlore Liter | Chlorhexatine Liter | Sodium chloride Kg. | Glycerine Liter | Coxstar liter | Ammonia solution Liter | ESR solution liter |
|--------------|-----------------|----------------------------|---------------------|-------------------------|------------------|--------------------|-----------------|------------------------|---------------------------|--------------------|------------------|------------------------------|--------------------------|
| Ninawa | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.1 | 0.0 | 0.0 | 0.0 |
| Karkook | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 480.0 | 0.0 | 0.0 | 216.0 |
| Diala | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 54.0 | 0.0 | 0.0 | 0.0 | 300.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1840.0 | 0.0 | 0.0 | 0.0 | 505.1 | 0.0 | 0.0 | 0.0 |
| Baghdad | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 417.0 | 0.0 | 4.0 | 0.0 | 0.0 | 5.0 | 0.0 | 11084.0 |
| Babel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 700.0 |
| Karbala | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0.0 | 0.0 | 0.0 | 0.0 | 1044.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 200.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 360.0 | 1200.0 | 240.0 | 120.0 | 120.0 | 32.0 | 0.0 | 0.0 | 0.0 | 25.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 | 0.0 | 0.0 | 250.0 | 25.0 |
| Misan | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 700.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0.0 | 0.0 | 0.0 | 0.0 | 90.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2440.0 |
| Total | 360.0 | 1210.0 | 240.0 | 120.0 | 1260.0 | 2543.0 | 150.0 | 4.0 | 5.0 | 2057.2 | 5.0 | 250.0 | 14465.0 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/06/2008 (Cont'd)

| Governorate | Insecticide | Insecticide | Insecticide | Rodenticide | Rodenticide | Rodenticide | HCL solution | VDP Solution | WBC Solution | WIDAL Solution | Bendict Solution | Driksen Solution | Drinedriver Solution |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|-----------------|----------------|------------------|------------------|----------------------|
| | Liter | Liter | Liter | Liter | Liter | Liter | ml | ml | ml | ml | cc | Liter | cc |
| Ninawa | 538.5 | 429.0 | 283.4 | 0.0 | 76.0 | 210.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0.0 | 0.0 | 177.0 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 0.0 | 0.0 | 24.0 | 0.0 | 0.0 | 60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 453.0 | 30.0 | 0.0 | 723.0 | 20.0 | 260.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 1087.0 | 428.0 | 51.0 | 1087.0 | 1196.0 | 1095.0 | 1519.0 | 100.0 | 3799.0 | 372.0 | 4000 | 0.0 | 1100 |
| Babel | 16.0 | 15.0 | 188.7 | 0.0 | 16.0 | 54.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 102.7 | 176.0 | 2099.0 | 4.0 | 132.0 | 287.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 13.0 | 410.0 | 20.0 | 0.0 | 10.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 95.0 | 0.0 | 34.0 | 6.0 | 0.0 | 182.0 | 0.0 | 0.0 | 250.0 | 4.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0.0 | 467.0 | 43.5 | 120.0 | 0.0 | 114.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 6.0 | 0.0 | 1.0 | 6.0 | 0.0 | 1.0 | 0.0 | 0.0 | 268671.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | 30.0 | 0.0 | 11.0 | 16.0 | 0.0 | 17.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 154.0 | 0.0 | 126.0 | 0.0 | 0.0 | 47.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 45.0 | 0.0 | 77.0 | 9.0 | 0.0 | 30.0 | 0.0 | 0.0 | 90.0 | 0.0 | 0.0 | 6.0 | 0.0 |
| Basra | 0.0 | 30.0 | 0.0 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 502.0 | 200.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 47.0 | 343.0 | 0.0 | 99.0 | 27.0 | 15.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 190.0 | 541.0 | 0.0 | 46.0 | 0.0 | 70.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 3279.2 | 3069.0 | 3135.6 | 2116.0 | 1475.0 | 2466.8 | 1519.0 | 100.0 | 272810.0 | 376.0 | 4000 | 6.0 | 1100 |

Table No. (11): Amounts of hazardous chemicals provided at State and private hospitals and other health facilities by Governorate:

1/1/2008 – 30/06/2008 (Cont'd)

| Governorate | Hexatocine Solution Liter | Detergent Kg. | Air fresher Bottle | Mekonkiakar Kg. | Melstacid Liter | Sodium nitrate ml | Silver nitrate Kg. | Iodine Liter | Neostigemine Ampoule | Halothane Liter | Halothane Bottle | Hypochlor Liter | Hypoxide Liter |
|--------------|------------------------------|------------------|--------------------------|--------------------|--------------------|-------------------------|--------------------------|-----------------|-------------------------|--------------------|---------------------|--------------------|-------------------|
| Ninawa | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1060.5 | 50.0 | 0.0 | 0.0 |
| Karkook | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 130.0 | 0.0 | 0.0 |
| Diala | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 88.0 | 0.0 | 13.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1100.0 | 0.0 | 114.3 | 230.0 | 0.0 | 0.0 |
| Baghdad | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 467.5 | 1197.0 | 900.0 | 0.0 |
| Babel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 180.0 | 26.0 | 50.0 | 0.0 | 0.0 |
| Karbala | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 681.0 | 0.0 | 0.0 |
| Waset | 0.0 | 0.0 | 540.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 215.0 | 0.0 | 0.0 |
| Saladin | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3250.0 | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 | 0.0 |
| Najaf | 0.0 | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 235.0 | 0.0 | 0.0 |
| Qadeseya | 0.0 | 0.0 | 0.0 | 0.0 | 415.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 0.0 | 0.0 | 60.0 |
| Muthana | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 44.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0.0 | 25.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 438.0 | 0.0 | 0.0 |
| Basra | 60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 368.0 | 480.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 238.5 | 615.0 | 0.0 | 0.0 |
| Erbil | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 771.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0.0 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 165.0 | 8677.0 | 0.0 | 0.0 |
| Total | 60.0 | 45.0 | 540.0 | 8.0 | 415.0 | 3250.0 | 100.0 | 1188.0 | 280.0 | 3336.0 | 12998.0 | 900.0 | 60.0 |

Table No. (12): Amount of expired hazardous chemicals available in State and private hospitals and other health facilities and percentage of disposal methods of those chemicals by Governorate: 01/01/2008 – 30/06/2008

| Governorate | Amount of Expired Chemicals and drugs (Liter) | Percentage of disposal methods | | | | | | | Amount of Expired Chemicals and drugs(Gram) | Percentage of disposal methods | | | | | | |
|---------------------|---|--------------------------------|------------|------------|------------|------------|-------------|------------|---|--------------------------------|------------|------------|------------|------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ninawa | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 134 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 55 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 65 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Babel | 25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14000 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 490 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 500 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1408 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | |
| Sulimanya | 6 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 650 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 871 | 0.0 | 0.0 | 0.0 | 6.3 | 0.8 | 92.0 | 0.0 | 16463 | 96.6 | 0.0 | 0.0 | 0.4 | 3.0 | 0.0 | 0.0 |

1- Incineration onsite using private incinerator

2- incineration offsite using central incinerator

3- haphazard burning without incinerator

4- Storage in facility until handed to specialized entity

5- return to supplier

6- handing to specialized or official entity

7- other

Table No. (12): Amount of expired hazardous chemicals available in State and private hospitals and other health facilities and percentage of disposal methods of those chemicals by Governorate: 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Amount of Expired Chemicals and drugs (Bottle) | Percentage of disposal methods | | | | | | | Amount of Expired Chemicals and drugs (Box) | Percentage of disposal methods | | | | | | |
|--------------|--|--------------------------------|------------|------------|-------------|-------------|-------------|-------------|---|--------------------------------|------------|-------------|------------|-------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ninawa | 3670 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 70 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Karkook | 400 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 1183 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 63 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 8480 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 373 | 80.4 | 0.0 | 0.0 | 0.0 | 0.0 | 19.6 | 0.0 |
| Babel | 1401 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 105 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Karbala | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 300 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 3156 | 0.0 | 0.0 | 0.0 | 3.2 | 0.0 | 96.8 | 0.0 | 2269 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 11108 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 3787 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Najaf | 2010 | 0.0 | 0.0 | 0.0 | 16.9 | 0.0 | 72.0 | 11.1 | 206 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 299 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 98.7 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | 27643 | 0.0 | 0.0 | 0.0 | 82.1 | 0.0 | 17.9 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 9315 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 450 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Misan | 2432 | 0.0 | 0.0 | 0.0 | 48.3 | 0.0 | 51.7 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | |
| Sulimaneya | 1010 | 0.0 | 0.0 | 0.0 | 1.0 | 99.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 953 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 55 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 72.7 | 27.3 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 74118 | 0.0 | 0.0 | 0.0 | 32.8 | 16.3 | 37.8 | 12.9 | 7633 | 8.7 | 0.0 | 29.7 | 8.7 | 49.6 | 3.2 | 0.0 |

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4- Storage in facility until handed to specialized entity

5- return to supplier

6- handing to specialized or official entity

7- others

Table No. (12): Amount of expired hazardous chemicals available in State and private hospitals and other health facilities and percentage of disposal methods of those chemicals by Governorate: 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Amount of Expired Chemicals and drugs (Number) | Percentage of disposal methods | | | | | | | Amount of Expired Chemicals and drugs (Bag) | Percentage of disposal methods | | | | | | |
|--------------|--|--------------------------------|------------|------------|-------------|-------------|-------------|-------------|---|--------------------------------|------------|------------|------------|------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ninawa | 11321 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 900 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 12071 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 98.7 | 1990 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 2524 | 0.0 | 0.0 | 22.2 | 0.0 | 0.0 | 0.0 | 77.8 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 60428 | 0.1 | 13.6 | | 0.7 | | 84.1 | 1.6 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Babel | 13419 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 99.7 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 87950 | 5.6 | 0.0 | 0.0 | 94.4 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 139100 | 70.5 | 0.0 | 26.5 | 3.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 105772 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 161725 | 0.0 | 0.0 | 0.0 | 34.0 | 0.0 | 5.7 | 60.3 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 18762 | 0.0 | 0.0 | 0.0 | 6.5 | 0.0 | 93.5 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | 99410 | 4.2 | 0.0 | 0.0 | 95.8 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 18990 | 0.0 | 0.0 | 0.0 | 19.4 | 0.0 | 0.0 | 80.6 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 118930 | 23.3 | 2.6 | 0.0 | 47.2 | 2.1 | 24.8 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | |
| Sulimanya | 25653 | 0.0 | 0.0 | 32.9 | 53.9 | 6.1 | 7.1 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 34676 | 2.0 | 0.0 | 94.6 | 0.0 | 0.0 | 3.4 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 33590 | 0.0 | 0.0 | 0.0 | 0.0 | 26.0 | 65.9 | 8.1 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 936221 | 14.5 | 1.2 | 8.4 | 32.5 | 13.9 | 15.5 | 13.9 | 1990 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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3- haphazard burning without incinerator

4- Storage in facility until handed to specialized entity

5- return to supplier

6- handing to specialized or official entity

7- others

Table No. (12): Amount of expired hazardous chemicals available in State and private hospitals and other health facilities and percentage of disposal methods of those chemicals by Governorate: 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Amount of Expired Chemicals and drugs (packet) | Percentage of disposal methods | | | | | | | Amount of Expired Chemicals and drugs (ml.) | Percentage of disposal methods | | | | | | |
|--------------|--|--------------------------------|----------|-------------|----------|----------|----------|----------|---|--------------------------------|----------|----------|-------------|-------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ninawa | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 162 | 100 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0.0 | 0.0 | 100 | 0.0 |
| Babel | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 1030 | 0 | 0 | 0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 3000 | 0 | 0 | 0 | 0.0 | 100 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | |
| Sulimanya | 100 | 0.0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 262 | 61.8 | 0 | 38.2 | 0 | 0 | 0 | 0 | 4034 | 0 | 0 | 0 | 25.5 | 74.4 | 0.1 | 0.0 |

1- Incineration onsite using private incinerator

2- incineration offsite using central incinerator

3- haphazard burning without incinerator

4- Storage in facility until handed to specialized entity

5- return to supplier

6- handing to specialized or official entity

7- others

Table No. (12): Amount of expired hazardous chemicals available in State and private hospitals and other health facilities and percentage of disposal methods of those chemicals by Governorate: 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Amount of Expired Chemicals and drugs (dose) | Percentage of disposal methods | | | | | | | Amount of Expired Chemicals and drugs (ampoule.) | Percentage of disposal methods | | | | | | | |
|--------------|--|--------------------------------|------------|------------|------------|------------|------------|------------|--|--------------------------------|------------|------------|-------------|-------------|-------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Ninawa | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Baghdad | 50 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 1881 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Babel | 181 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 5405 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Waset | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8361 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1740 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100 | 0.0 | 0.0 |
| Najaf | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 989 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Qadeseya | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 320 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 34.8 | 0.0 | 0.0 |
| Muthana | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5340 | 0.0 | 0.0 | 0.0 | 65.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2451 | 0.0 | 0.0 | 0.0 | 32.2 | 0.0 | 0.0 | 0.0 | 68 |
| Misan | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1833 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | | |
| Sulimaneya | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18976 | 0.0 | 0.0 | 0.0 | 4.2 | 16.3 | 79.5 | 0.0 | 0.0 |
| Erbil | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 451 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Dhook | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1162 | 0.0 | 0.0 | 0.0 | 0.0 | 43.0 | 18.2 | 38 | 0.0 |
| Total | 231 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 48909 | 0.0 | 0.0 | 0.0 | 10.3 | 11.5 | 73.9 | 4.3 | 0.0 |

1- Incineration onsite using private incinerator

2- incineration offsite using central incinerator

3- haphazard burning without incinerator

4- Storage in facility until handed to specialized entity

5- return to supplier

6- handing to specialized or official entity

7- others

Table No. (12): Amount of expired hazardous chemicals available in State and private hospitals and other health facilities and percentage of disposal methods of those chemicals by Governorate: 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Amount of Expired Chemicals and drugs (packet) | Percentage of disposal methods | | | | | | | Amount of Expired Chemicals and drugs (ml.) | Percentage of disposal methods | | | | | | |
|--------------|--|--------------------------------|----------|-------------|----------|----------|----------|----------|---|--------------------------------|----------|----------|-------------|-------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ninawa | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 162 | 100 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0.0 | 0.0 | 100 | 0.0 |
| Babel | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 1030 | 0 | 0 | 0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 3000 | 0 | 0 | 0 | 0.0 | 100 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | |
| Sulimaneya | 100 | 0.0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 262 | 61.8 | 0 | 38.2 | 0 | 0 | 0 | 0 | 4034 | 0 | 0 | 0 | 25.5 | 74.4 | 0.1 | 0.0 |

1- Incineration onsite using private incinerator

2- incineration offsite using central incinerator

3- haphazard burning without incinerator

4- Storage in facility until handed to specialized entity

5- return to supplier

6- handing to specialized or official entity

7- others

Table No. (12): Amount of expired hazardous chemicals available in State and private hospitals and other health facilities and percentage of disposal methods of those chemicals by Governorate: 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Amount of Expired Chemicals and drugs (dose) | Percentage of disposal methods | | | | | | | Amount of Expired Chemicals and drugs (ampoule) | Percentage of disposal methods | | | | | | | |
|--------------|--|--------------------------------|------------|------------|------------|------------|------------|------------|---|--------------------------------|------------|------------|-------------|-------------|-------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Ninawa | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Baghdad | 50 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 1881 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Babel | 181 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 5405 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Waset | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8361 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1740 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 100 | 0.0 | 0.0 |
| Najaf | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 989 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Qadeseya | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 320 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 34.8 | 0.0 | 0.0 |
| Muthana | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5340 | 0.0 | 0.0 | 0.0 | 65.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2451 | 0.0 | 0.0 | 0.0 | 32.2 | 0.0 | 0.0 | 0.0 | 67.8 |
| Misan | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1833 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | | |
| Sulimaneya | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18976 | 0.0 | 0.0 | 0.0 | 4.2 | 16.3 | 79.5 | 0.0 | 0.0 |
| Erbil | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 451 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Dhook | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1162 | 0.0 | 0.0 | 0.0 | 0.0 | 43.0 | 18.2 | 38.0 | 0.0 |
| Total | 231 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 48909 | 0.0 | 0.0 | 0.0 | 10.3 | 11.5 | 73.9 | 4.3 | 0.0 |

1- Incineration onsite using private incinerator

2- incineration offsite using central incinerator

3- haphazard burning without incinerator

4- Storage in facility until handed to specialized entity

5- return to supplier

6- handing to specialized or official entity

7- others

Table No. (12): Amount of expired hazardous chemicals available in State and private hospitals and other health facilities and percentage of disposal methods of those chemicals by Governorate: 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Amount of Expired Chemicals and drugs (dozen) | Percentage of disposal methods | | | | | | | Amount of Expired Chemicals and drugs (thousand) | Percentage of disposal methods | | | | | | | |
|--------------|---|--------------------------------|------------|------------|------------|------------|------------|------------|--|--------------------------------|------------|------------|------------|------------|------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Ninawa | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Babel | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 450 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 91 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Saladin | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 183 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |
| Muthana | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | | |
| Sulimaneya | 5 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 455 | 98.9 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 274 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 |

1- Incineration onsite using private incinerator

2- incineration offsite using central incinerator

3- haphazard burning without incinerator

4- Storage in facility until handed to specialized entity

5- return to supplier

6- handing to specialized or official entity

7- others

Table No. (13): Amount of expired hazardous chemicals (radioactive and genotoxic) in State and private hospitals, and percentage of disposal methods of those chemicals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Amount of hazardous chemicals and drugs (radioactive and genotoxic) Liter | Percentage of Disposal method | | | Amount of hazardous chemicals and drugs (radioactive and genotoxic) Bottle | Percentage of Disposal method | | | Amount of hazardous chemicals and Drugs (radioactive and genotoxic) Number | Percentage of disposal method | | |
|--------------|--|-------------------------------|------------|------------|---|-------------------------------|------------|------------|---|-------------------------------|------------|------------|
| | | 1 | 2 | 3 | | 1 | 2 | 3 | | 1 | 2 | 3 |
| Ninawa | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Diala | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Babel | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Waset | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Muthana | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Misan | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | |
| Sulimaneya | 0 | 0.0 | 0.0 | 0.0 | 160 | 100. | 0.0 | 0.0 | 4280 | 99.4 | 0.0 | 0.6 |
| Erbil | 252 | 0.0 | 100 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Total | 252 | 0.0 | 100 | 0.0 | 160 | 100 | 0.0 | 0.0 | 4280 | 99.4 | 0.0 | 0.6 |

1- Storage inside health facilityd until disposed of

2- Drainage into public sewer network

3- Handed to a specialized or official entity

Table No. (13): Amount of expired hazardous chemicals (radioactive and genotoxic) in State and private hospitals, and percentage of disposal methods of those chemicals by Governorate : 01/01/2008 – 30/06/2008 (Cont'd)

| Governorate | Amount of hazardous chemicals and drugs (radioactive and genotoxic) Box | Percentage of Disposal method | | | Amount of hazardous chemicals and drugs (radioactive and genotoxic) ampoule | Percentage of Disposal method | | |
|--------------|--|-------------------------------|------------|------------|--|-------------------------------|------------|------------|
| | | 1 | 2 | 3 | | 1 | 2 | 3 |
| Ninawa | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Karkook | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Diala | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Anbar | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Babel | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Waset | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Saladin | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Muthana | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Misan | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Basra | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | |
| Sulimaneya | 12 | 100 | 0.0 | 0.0 | 500 | 100 | 0.0 | 0.0 |
| Erbil | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Dhook | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Total | 12 | 100 | 0.0 | 0.0 | 500 | 100 | 0.0 | 0.0 |

1- Storage inside health facilityd until disposed of

2- Drainage into public sewer network

3- Handed to a specialized or official entity

Table No. (14): Number of fixed assets in State and private hospitals and other health facilities statewide used for environmental protection and their validity, average temperature, operational capacity and average cycle period : 01/01/2008 – 30/06/2008

| Category | Type | No. | Functionality | | Average Temp. (°C) equipment | Average capacity | | Average period | |
|--|----------------------|------|---------------|--------------|---------------------------------|------------------|-------------|----------------|------|
| | | | Functioning | In disrepair | | Amount | Unit | Minute | Hour |
| Incinerators | Double chamber | 35 | 29 | 6 | 629 | 155 | Kg\day | 33 | 2 |
| | Single chamber | 175 | 142 | 33 | 357 | 127 | Kg\day | 41 | 2 |
| | Rotary kiln | 12 | 10 | 2 | 835 | 158 | Kg\day | 28 | 2 |
| | Burn cylinder barrel | 95 | 80 | 15 | 261 | 91 | Kg\day | 1 | 2 |
| | Cement incinerator | 214 | 184 | 30 | 243 | 44 | Kg\day | 6 | 2 |
| Autoclave (wet heat) | | 1223 | 1084 | 139 | 171 | 20 | Kg | 56 | 1 |
| Dry heat sterilization | | 2145 | 2034 | 111 | 185 | 76 | Kg | 52 | 1 |
| Wastewater Treatment U. | | 31 | 28 | 3 | | 156 | Cubic Meter | | |
| Hazardous & Explosive material store | | 48 | | | | 36 | Cubic Meter | | |
| Total | | 3978 | 3591 | 339 | | | | | |

Table No. (15): Volume of water consumed and waste water generated, and percentages of sources consumed water in State and private hospitals by Governorate: 01/01/2008 – 30/06/2008

| Governorate | Type | Amount of consumed water cubic meter | Amount of generated wastewater cubic meter | Amount of consumed water by source % | | | | | | |
|-------------|---------|--------------------------------------|--|--------------------------------------|------|-------|------------|----------|-------|-------|
| | | | | Drinking water | Well | River | Tank truck | RO Water | Other | Total |
| Ninawa | State | 215901 | 150424 | 97.6 | 1.0 | 0.0 | 1.4 | 0.0 | 0.0 | 100.0 |
| | Private | 8400 | 7900 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Karkook | State | 56476 | 54196 | 67.7 | 31.8 | 0.0 | 0.0 | 0.5 | 0.0 | 100.0 |
| | Private | 6432 | 3932 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Diala | State | 28659 | 24779 | 90.2 | 9.8 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 1402 | 1202 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Anbar | State | 133440 | 120158 | 93.7 | 5.0 | 1.4 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 540 | 200 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 100.0 |
| Baghdad | State | 875815 | 744398 | 98.4 | 0.0 | 0.0 | 1.0 | 0.6 | 0.0 | 100.0 |
| | Private | 95284 | 69987 | 98.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Babel | State | 85150 | 58679 | 99.1 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 100.0 |
| | Private | 7620 | 5080 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Karbala | State | 2860 | 2200 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 940 | 750 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Waset | State | 205004 | 174124 | 99.1 | 0.0 | 0.8 | 0.0 | 0.1 | 0.0 | 100.0 |
| | Private | 1600 | 1100 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Saladin | State | 76637 | 63000 | 97.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 4005 | 3505 | 99.9 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Najaf | State | 138680 | 117670 | 70.8 | 20.9 | 0.0 | 7.8 | 0.5 | 0.0 | 100.0 |
| | Private | 3440 | 3050 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Qadeseya | State | 24970.0 | 20739.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 5500.0 | 5200.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Muthana | State | 11386.5 | 10450.5 | 99.8 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 100.0 |
| | Private | 185.5 | 160.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Thee Qar | State | 58467.0 | 53248.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 540.0 | 486.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |

| Governorate | Type | Amount of consumed water cubic meter | Amount of generated wastewater cubic meter | Amount of consumed water by source % | | | | | | |
|---------------------|---------|--------------------------------------|--|--------------------------------------|------|-------|------------|----------|-------|-------|
| | | | | Drinking water | Well | River | Tank truck | RO Water | Other | Total |
| Misan | State | 111800.0 | 96920.0 | 96.1 | 0.0 | 0.0 | 0.0 | 3.9 | 0.0 | 100.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 129686.0 | 125694.0 | 96.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 | 100.0 |
| | Private | 8991.0 | 8840.0 | 96.8 | 0.0 | 0.0 | 0.0 | 3.2 | 0.0 | 100.0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | State | 141730 | 95154.0 | 27.5 | 66.1 | 0.0 | 6.4 | 0.0 | 0.0 | 100.0 |
| | Private | 7630.0 | 6020.0 | 28.7 | 48.5 | 0.0 | 22.8 | 0.0 | 0.0 | 100.0 |
| Erbil | State | 38590.0 | 35165.0 | 64.0 | 35.4 | 0.0 | 0.6 | 0.0 | 0.0 | 100.0 |
| | Private | 1860.0 | 1795.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Dhook | State | 24988.0 | 22130.0 | 82.1 | 14.2 | 0.0 | 0.0 | 3.7 | 0.0 | 100.0 |
| | Private | 3780.0 | 3465.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Total | State | 2360239.5 | 1969128.5 | 90.5 | 7.3 | 0.1 | 1.4 | 0.7 | 0.0 | 100.0 |
| | Private | 158149.0 | 122672.0 | 95.7 | 2.3 | 0.0 | 1.1 | 0.2 | 0.6 | 100.0 |

Table No. (16): Volume of water consumed and wastewater generated, and percentages of sources of consumed water in other health facilities (except hospitals) by Governorate: 01/01/2008 – 30/06/2008

| Governorate | Amount of consumed water cubic meter | Amount of generated wastewater cubic meter | Amount of consumed water by source % | | | | | | |
|--------------|--------------------------------------|--|--------------------------------------|------------|------------|------------|------------|------------|--------------|
| | | | Drinking water | Well | River | Tank truck | RO Water | Other | Total |
| Ninawa | 53625.0 | 47755.0 | 95.7 | 3.0 | 0.0 | 1.3 | 0.0 | 0.0 | 100.0 |
| Karkook | 11754.0 | 8544.0 | 93.5 | 6.5 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Diala | 3454.0 | 2711.0 | 91.0 | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Anbar | 9461.0 | 7724.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Baghdad | 159875.0 | 102402.0 | 99.7 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 100.0 |
| Babel | 20730.0 | 16165.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Karbala | 6505.0 | 4460.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Waset | 16660.0 | 11835.0 | 98.8 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Saladin | 5863.0 | 4853.0 | 99.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 100.0 |
| Najaf | 16757.0 | 16140.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Qadeseya | 8888.0 | 7856.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Muthana | 9816.3 | 7361.5 | 99.7 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 100.0 |
| Thee Qar | 21269.0 | 19421.7 | 99.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 100.0 |
| Misan | 10556.0 | 8523.0 | 89.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.3 | 100.0 |
| Basra | 21052.0 | 19948.0 | 94.0 | 0.0 | 0.0 | 0.0 | 6.0 | 0.0 | 100.0 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 57293.0 | 31420.0 | 33.1 | 65.8 | 0.0 | 1.1 | 0.0 | 0.0 | 100.0 |
| Erbil | 8460.0 | 7650.0 | 77.6 | 21.9 | 0.0 | 0.5 | 0.0 | 0.0 | 100.0 |
| Dhook | 13520.0 | 12212.0 | 95.6 | 4.3 | 0.0 | 0.0 | 0.1 | 0.0 | 100.0 |
| Total | 455538.3 | 336981.2 | 89.8 | 9.4 | 0.0 | 0.4 | 0.4 | 0.0 | 100.0 |

Table No. (17): Volumes of wastewater generated and wastewater treated, percentages of the volume of treated wastewater and methods of final disposal at State and private hospitals by Governorate: 01/01/2008 – 30/06/2008

| Governorate | Type | Amount of generated wastewater Cubic meter | Amount of wastewater treated in treatment unit Cubic meter | Percentage of treated wastewater % | Percentage of disposal method | | | | | | | | Total |
|-------------|---------|---|---|---------------------------------------|-------------------------------|--------------------|---------------------------|-----------------------------------|-----------------|-------------------|---------|--------|-------|
| | | | | | Drainage to sewer network | Discharge To river | Disposal To septic lagoon | Haphazard disposal to nearby land | Soil septic pit | Sealed septic pit | Re-used | Others | |
| Ninawa | State | 150424.0 | 604.0 | 0.4 | 64.3 | 0.0 | 0.0 | 2.7 | 7.2 | 24.8 | 0.0 | 1.0 | 100.0 |
| | Private | 7900.0 | 0.0 | 0.0 | 43.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.0 | 0.0 | 0.0 | 100.0 |
| Karkook | State | 54196.0 | 786.0 | 1.5 | 39.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5 | 100.0 |
| | Private | 3932.0 | 0.0 | 0.0 | 36.4 | 0.0 | 0.0 | 0.0 | 0.0 | 63.6 | 0.0 | 0.0 | 100.0 |
| Diala | State | 24779.0 | 0.0 | 0.0 | 28.2 | 0.0 | 0.0 | 0.0 | 0.0 | 71.8 | 0.0 | 0.0 | 100.0 |
| | Private | 1202.0 | 0.0 | 0.0 | 58.4 | 0.0 | 0.0 | 0.0 | 0.0 | 41.6 | 0.0 | 0.0 | 100.0 |
| Anbar | State | 120158.0 | 157.0 | 0.1 | 25.0 | 1.4 | 50.0 | 0.0 | 0.0 | 20.5 | 0.0 | 4.5 | 100.0 |
| | Private | 200.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Baghdad | State | 744398.0 | 90.0 | 0.0 | 99.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.2 | 100.0 |
| | Private | 69987.0 | 0.0 | 0.0 | 97.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 1.4 | 100.0 |
| Babel | State | 58679.0 | 97.2 | 0.2 | 75.6 | 0.0 | 18.7 | 0.0 | 0.0 | 5.7 | 0.0 | 0.0 | 100.0 |
| | Private | 5080.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 |
| Karbala | State | 2200.0 | 0.0 | 0.0 | 76.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 23.2 | 100.0 |
| | Private | 750.0 | 0.0 | 0.0 | 60.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40.0 | 0.0 | 0.0 | 100.0 |
| Waset | State | 174124.0 | 300.0 | 0.2 | 21.3 | 0.8 | 15.5 | 40.2 | 0.0 | 22.3 | 0.0 | 0.7 | 100.0 |
| | Private | 1100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Saladin | State | 63000.0 | 40.0 | 0.1 | 11.3 | 0.0 | 0.0 | 1.4 | 0.0 | 87.3 | 0.0 | 0.0 | 100.0 |
| | Private | 3505.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Najaf | State | 117670.0 | 38.0 | 0.0 | 68.5 | 0.0 | 0.0 | 21.2 | 0.0 | 10.3 | 0.0 | 0.0 | 100.0 |
| | Private | 3050.0 | 0.0 | 0.0 | 42.6 | 0.0 | 0.0 | 0.0 | 0.0 | 57.4 | 0.0 | 0.0 | 100.0 |
| Qadeseya | State | 20739.0 | 36.0 | 0.2 | 33.4 | 0.0 | 0.0 | 0.0 | 0.0 | 66.6 | 0.0 | 0.0 | 100.0 |
| | Private | 5200.0 | 0.0 | 0.0 | 53.8 | 0.0 | 0.0 | 0.0 | 0.0 | 46.2 | 0.0 | 0.0 | 100.0 |

| Governorate | Type | Amount of generated wastewater Cubic meter | Amount of wastewater treated in treatment unit Cubic meter | Percentage of treated wastewater % | Percentage of disposal method | | | | | | | | Total |
|--------------|---------|---|---|---------------------------------------|-------------------------------|--------------------|---------------------------|-----------------------------------|-----------------|-------------------|---------|--------|-------|
| | | | | | Drainage to sewer network | Discharge To river | Disposal To septic lagoon | Haphazard disposal to nearby land | Soil septic pit | Sealed septic pit | Re-used | Others | |
| Muthana | State | 10450.5 | 89.6 | 0.9 | 0.0 | 0.0 | 69.4 | 0.0 | 0.0 | 9.6 | 0.0 | 0.0 | 100.0 |
| | Private | 160.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 |
| Thee Qar | State | 53248.0 | 100.0 | 0.2 | 77.6 | 0.0 | 0.0 | 0.0 | 0.0 | 11.5 | 0.0 | 11.0 | 100.0 |
| | Private | 486.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Misan | State | 96920.0 | 380.0 | 0.4 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 125694.0 | 0.0 | 0.0 | 30.5 | 0.0 | 0.0 | 0.0 | 0.0 | 69.5 | 0.0 | 0.0 | 100.0 |
| | Private | 8840.0 | 0.0 | 0.0 | 78.8 | 0.0 | 0.0 | 0.0 | 0.0 | 21.2 | 0.0 | 0.0 | 100.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | State | 95154.0 | 0.0 | 0.0 | 98.5 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 6020.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Erbil | State | 35165.0 | 1610.0 | 4.6 | 90.3 | 0.0 | 0.0 | 0.0 | 9.7 | 0.0 | 0.0 | 0.0 | 100.0 |
| | Private | 1795.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Dhook | State | 22130.0 | 60.0 | 0.3 | 67.5 | 0.0 | 0.0 | 0.0 | 0.0 | 18.7 | 0.0 | 13.9 | 100.0 |
| | Private | 3465.0 | 0.0 | 0.0 | 12.3 | 0.0 | 0.0 | 0.0 | 0.0 | 87.7 | 0.0 | 0.0 | 100.0 |
| Total | State | 1969128.5 | 4387.8 | 0.2 | 70.6 | 0.1 | 5.4 | 5.1 | 0.9 | 15.4 | 0.0 | 1.1 | 100.0 |
| | Private | 122672.0 | 0.0 | 0.0 | 80.8 | 0.0 | 0.0 | 0.0 | 0.0 | 18.4 | 0.0 | 0.8 | 100.0 |

Table No. (18): Volumes of wastewater generated and wastewater treated, percentages of the volume of treated wastewater and methods of final disposal at other health facilities (except hospitals) by Governorate: 01/01/2008 – 30/06/2008

| Governorate | Amount of generated wastewater Cubic meter | Amount of wastewater treated in treatment unit Cubic meter | Percentage of treated wastewater % | Percentage of disposal method | | | | | | | | Total |
|--------------|---|---|---------------------------------------|-------------------------------|--------------------|---------------------------|-----------------------------------|-----------------|-------------------|------------|------------|--------------|
| | | | | Drainage to sewer network | Discharge To river | Disposal To septic lagoon | Haphazard disposal to nearby land | Soil septic pit | Sealed septic pit | Re-used | Others | |
| Ninawa | 47755.0 | 0.0 | 0.0 | 71.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.2 | 0.0 | 0.8 | 100.0 |
| Karkook | 8544.0 | 0.0 | 0.0 | 51.3 | 0.0 | 0.0 | 0.0 | 19.7 | 29.0 | 0.0 | 0.0 | 100.0 |
| Diala | 3611.0 | 0.0 | 0.0 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 97.2 | 0.0 | 0.0 | 100.0 |
| Anbar | 7724.0 | 0.0 | 0.0 | 38.6 | 0.0 | 0.0 | 0.0 | 1.9 | 59.5 | 0.0 | 0.0 | 100.0 |
| Baghdad | 102402.0 | 0.0 | 0.0 | 91.9 | 0.0 | 0.0 | 0.0 | 1.8 | 6.0 | 0.0 | 0.3 | 100.0 |
| Babel | 16165.0 | 0.0 | 0.0 | 38.3 | 0.0 | 0.0 | 0.0 | 12.1 | 49.7 | 0.0 | 0.0 | 100.0 |
| Karbala | 4460.0 | 0.0 | 0.0 | 60.2 | 0.0 | 0.0 | 0.0 | 6.2 | 26.9 | 0.0 | 6.7 | 100.0 |
| Waset | 11835.0 | 0.0 | 0.0 | 40.9 | 1.3 | 0.0 | 0.0 | 2.5 | 55.3 | 0.0 | 0.0 | 100.0 |
| Saladin | 4853.0 | 0.0 | 0.0 | 35.4 | 0.0 | 0.0 | 0.0 | 19.6 | 45.0 | 0.0 | 0.0 | 100.0 |
| Najaf | 16140.0 | 0.0 | 0.0 | 35.9 | 0.0 | 0.0 | 0.0 | 0.0 | 46.1 | 0.0 | 0.0 | 100.0 |
| Qadeseya | 7856.0 | 0.0 | 0.0 | 47.6 | 0.0 | 0.0 | 2.5 | 0.0 | 2.5 | 0.0 | 47.4 | 100.0 |
| Muthana | 7361.5 | 0.0 | 0.0 | 14.6 | 1.6 | 0.0 | 0.0 | 0.0 | 83.8 | 0.0 | 0.0 | 100.0 |
| Thee Qar | 19446.0 | 0.0 | 0.0 | 87.7 | 0.7 | 0.0 | 0.0 | 2.1 | 9.6 | 0.0 | 0.0 | 100.0 |
| Misan | 8523.0 | 0.0 | 0.0 | 94.1 | 0.0 | 0.0 | 0.0 | 4.5 | 1.4 | 0.0 | 0.0 | 100.0 |
| Basra | 19948.0 | 0.0 | 0.0 | 41.3 | 1.5 | 0.0 | 0.0 | 0.0 | 57.3 | 0.0 | 0.0 | 100.0 |
| Kurdistan R. | | | | | | | | | | | | |
| Sulimaneya | 31420.0 | 0.0 | 0.0 | 97.0 | 0.0 | 0.0 | 0.3 | 0.5 | 2.2 | 0.0 | 0.0 | 100.0 |
| Erbil | 7650.0 | 0.0 | 0.0 | 88.5 | 0.0 | 0.0 | 0.8 | 3.5 | 6.1 | 0.0 | 1.1 | 100.0 |
| Dhook | 12212.0 | 0.0 | 0.0 | 41.8 | 0.0 | 0.0 | 4.4 | 0.0 | 53.8 | 0.0 | 0.0 | 100.0 |
| Total | 337905.5 | 0.0 | 0.0 | 70.2 | 0.2 | 0.0 | 0.3 | 2.5 | 25.5 | 0.0 | 1.4 | 100.0 |

Table No. (19): Percentages of available wastewater treatment units, their operating condition, type of treatment and maintenance procedure in case of units failure at State and private hospitals and other health facilities. By Governorate: 1/1/2008 – 30/6/2008

| Governorate | State and private hospitals | | | | | Other health facilities (except hospitals) | | | | |
|--------------|--------------------------------------|--------------------------|------------------------|-------------|-----------------------------|--|--------------------------|------------------------|------------|-----------------------------|
| | % of availability of treatment units | % of operating condition | % of type of treatment | | % of maintenance procedures | % of availability of treatment units | % of operating condition | % of type of treatment | | % of maintenance procedures |
| | | | Full | Part | | | | Full | partial | |
| Ninawa | 17.7 | 100.0 | 66.7 | 33.3 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 37.5 | 100.0 | 33.3 | 66.7 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 16.7 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 15.4 | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 1.3 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Babel | 9.1 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 20.0 | 50.0 | 100.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 20.0 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 11.1 | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | 28.6 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | 80.0 | 75.0 | 66.7 | 33.3 | 75.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 11.1 | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 16.7 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 13.0 | 100.0 | 66.7 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 9.1 | 100.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 10.5 | 86.2 | 52.0 | 48.0 | 82.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Table No. (20): Percentage of usage of hazardous medical waste segregation method and segregation by color, the entity regulating segregation method and percentage of colored bags and containers used for hazardous medical waste collection at State and private hospital by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | % of Medical waste segregation separate from ordinary waste | % of segregation by color | % of entity regulating segregation | | | % of colors specified for bags and containers used for the collection of medical waste collection | | | | | | |
|-------------|---------|---|---------------------------|------------------------------------|--------------------|-------------------------|---|--------|------|-------|------|------|--------------|
| | | | | Health Institute | Ministry of Health | Ministry of Environment | Black | Yellow | Red | White | Blue | Gray | Other colors |
| Ninawa | State | 100.0 | 78.6 | 27.3 | 63.6 | 9.1 | 9.1 | 54.6 | 18.2 | 9.1 | 9.1 | 0.0 | 0.0 |
| | Private | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | State | 100.0 | 100.0 | 16.7 | 83.3 | 0.0 | 0.0 | 83.3 | 0.0 | 0.0 | 16.7 | 0.0 | 0.0 |
| | Private | 100.0 | 100.0 | 50.0 | 50.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | State | 66.7 | 83.3 | 60.0 | 40.0 | 0.0 | 0.0 | 40.0 | 40.0 | 20.0 | 0.0 | 0.0 | 0.0 |
| | Private | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 41.7 | 100.0 | 20.0 | 60.0 | 20.0 | 0.0 | 40.0 | 40.0 | 0.0 | 20.0 | 0.0 | 0.0 |
| | Private | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | State | 94.9 | 94.6 | 25.7 | 54.3 | 20.0 | 0.0 | 97.1 | 0.0 | 0.0 | 2.9 | 0.0 | 0.0 |
| | Private | 100.0 | 71.4 | 40.0 | 48.0 | 12.0 | 4.0 | 60.0 | 0.8 | 0.0 | 20.0 | 4.0 | 4.0 |
| Babel | State | 100.0 | 62.5 | 20.0 | 80.0 | 0.0 | 0.0 | 60.0 | 40.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 100.0 | 66.7 | 50.0 | 50.0 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | State | 100.0 | 100.0 | 0.0 | 80.0 | 20.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | State | 100.0 | 66.7 | 50.0 | 16.7 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 0.0 |
| | Private | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 88.9 | 37.5 | 33.3 | 33.3 | 33.3 | 0.0 | 33.3 | 0.0 | 0.0 | 66.7 | 0.0 | 0.0 |
| | Private | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 100.0 | 100.0 | 33.3 | 50.0 | 16.7 | 0.0 | 16.7 | 83.3 | 0.0 | 0.0 | 0.0 | 0.0 |

| Governorate | Type | % of Medical waste segregation separate from ordinary waste | % of segregation by color | % of entity regulating segregation | | | % of colors specified for bags and containers used for the collection of medical waste collection | | | | | | |
|--------------|---------|---|---------------------------|------------------------------------|--------------------|-------------------------|---|--------|-------|-------|------|------|--------------|
| | | | | Health Institute | Ministry of Health | Ministry of Environment | Black | Yellow | Red | White | Blue | Gray | Other colors |
| | Private | 100.0 | 100.0 | 33.3 | 66.7 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | State | 100.0 | 60.0 | 33.3 | 66.7 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | State | 100.0 | 50.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |
| | Private | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | State | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 25.0 | 25.0 | 37.5 | 0.0 | 0.0 | 0.0 | 12.5 |
| | Private | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | State | 100.0 | 83.3 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 100.0 | 100.0 | 75.0 | 8.3 | 16.7 | 8.3 | 91.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 100.0 | 80.0 | 25.0 | 0.0 | 75.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | State | 4.4 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | State | 29.4 | 80.0 | 100.0 | 0.0 | 0.0 | 50.0 | 0.0 | 25.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | State | 100.0 | 71.4 | 40.0 | 60.0 | 0.0 | 0.0 | 0.0 | 20.0 | 20.0 | 0.0 | 0.0 | 0.0 |
| | Private | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | State | 77.1 | 83.5 | 33.8 | 53.6 | 12.6 | 5.5 | 65.4 | 15.7 | 2.4 | 25.0 | 0.0 | 0.8 |
| | Private | 78.7 | 63.5 | 37.5 | 47.5 | 15.0 | 5.0 | 70.0 | 7.5 | 0.0 | 0.0 | 2.5 | 2.5 |

Table No. (21): Percentage of usage of hazardous medical waste segregation method and segregation by color, the entity regulating segregation method and percentage of colored bags and containers used for hazardous medical waste collection at other health facilities (except hospitals) by Governorate : 01/01/2008–30/6/2008

| Governorate | % of Medical Waste segregation separate from ordinary waste | % of segregation by color | % of entity regulating segregation | | | % of colors specified for bags and containers used for the collection of medical waste collection | | | | | | | |
|--------------|---|---------------------------|------------------------------------|--------------------|-------------------------|---|-------------|------------|------------|------------|------------|------------|--------------|
| | | | Health institute | Ministry of Health | Ministry of Environment | Black | Yellow | Red | Green | white | orange | blue | Other colors |
| Ninawa | 40.0 | 55.0 | 9.1 | 90.9 | 0.0 | 9.1 | 90.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 85.7 | 70.0 | 0.0 | 100 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 18.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 80.1 | 60.2 | 13.2 | 72.1 | 14.7 | 2.9 | 88.2 | 0.0 | 1.5 | 4.4 | 1.5 | 1.5 | 0.0 |
| Babel | 82.9 | 31.0 | 0.0 | 100 | 0.0 | 11.1 | 77.8 | 11.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 91.3 | 95.2 | 0.0 | 100 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 31.8 | 28.6 | 50.0 | 50.0 | 0.0 | 50.0 | 50 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 79.0 | 6.7 | 0.0 | 100.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 95.5 | 85.7 | 72.2 | 22.2 | 5.6 | 11.1 | 77.8 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6 |
| Qadeseya | 82.8 | 25.0 | 0.0 | 100 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | 71.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 58.1 | 94.4 | 23.5 | 76.5 | 0.0 | 11.8 | 70.6 | 17.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 14.8 | 25.0 | 0.0 | 100 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 87.2 | 56.1 | 47.8 | 21.7 | 30.4 | 17.4 | 28.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 9.1 | 33.3 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 71.4 | 20.0 | 20.0 | 80.0 | 0.0 | 0.0 | 60.0 | 0.0 | 20 | 0.0 | 0.0 | 20 | 0.0 |
| Total | 58.6 | 51.9 | 20.2 | 70.9 | 8.9 | 6.4 | 86.2 | 3.0 | 1.0 | 1.5 | 0.5 | 1.0 | 0.5 |

Table No. (22): Amount of generated hazardous medical waste, daily averages, percentage of medical waste final disposal method and available special containers for the collection of disposable sharp objects and radioactive waste, in State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | Amount of hazardous medical waste Kg\6months | Average amount of hazardous waste generated per day Kg\day | % of final disposal method of hazardous waste | | | | | | % of: | |
|-------------|---------|--|--|---|-------|------|-----|-----|-------|--|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | Available Containers For disposable sharps | Available leaded containers for radioactive waste |
| Ninawa | State | 40003.6 | 15.7 | 78.6 | 14.3 | 7.1 | 0.0 | 0.0 | 0.0 | 35.7 | 0.0 |
| | Private | 910.0 | 5.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Karkook | State | 28828.8 | 26.4 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 85.7 | 0.0 |
| | Private | 3640.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 0.0 |
| Diala | State | 14305.2 | 13.1 | 33.3 | 16.7 | 50.0 | 0.0 | 0.0 | 0.0 | 16.7 | 0.0 |
| | Private | 182.0 | 1.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 16926.0 | 18.6 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| | Private | 728.0 | 4.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Baghdad | State | 334734.4 | 48.4 | 83.0 | 14.6 | 2.4 | 0.0 | 0.0 | 0.0 | 87.8 | 4.9 |
| | Private | 32041.1 | 5.0 | 2.9 | 34.2 | 0.0 | 2.9 | 0.0 | 60.0 | 80.0 | 0.0 |
| Babel | State | 38001.6 | 26.1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 0.0 |
| | Private | 6552.0 | 12.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 66.7 | 0.0 |
| Karbala | State | 37128.0 | 40.8 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 0.0 |
| | Private | 4550.0 | 12.5 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Waset | State | 24406.2 | 14.9 | 55.6 | 0.0 | 44.4 | 0.0 | 0.0 | 0.0 | 66.7 | 0.0 |
| | Private | 728.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 0.0 |
| Saladin | State | 25188.8 | 17.3 | 87.5 | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 |
| | Private | 1820.0 | 10.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Najaf | State | 61916.4 | 56.7 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| | Private | 6069.8 | 11.3 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 66.7 | 0.0 |
| Qadeseya | State | 53690.0 | 59.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| | Private | 4550.0 | 12.5 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | State | 38438.4 | 52.8 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 546.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Thee Qar | State | 39312.0 | 27.0 | 87.5 | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| | Private | 364.0 | 2.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |

| Governorate | Type | Amount of hazardous medical waste Kg\6months | Average amount of hazardous waste generated per day Kg\day | % of final disposal method of hazardous waste | | | | | | % of: | | |
|---------------------|---------|--|--|---|------|------|-----|------|------|--|---|-----|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | Available Containers For disposable sharps | Available leaded containers for radioactive waste | |
| Misan | State | 49140.0 | 45.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 84084.0 | 38.5 | 91.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.3 | 41.7 | 0.0 |
| | Private | 4914.0 | 5.4 | 0.0 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 80.0 | 60.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | |
| Sulimaneya | State | 9100.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | State | 40222.0 | 44.2 | 80.0 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 80.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | State | 54654.6 | 42.9 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| | Private | 8736.0 | 12.0 | 0.0 | 75.0 | 13.7 | 0.0 | 0.0 | 11.3 | 100.0 | 100.0 | 0.0 |
| Total | State | 990080.0 | 35.4 | 84.0 | 9.2 | 5.8 | 0.0 | 0.3 | 0.7 | 73.6 | 73.6 | 1.9 |
| | Private | 76430.9 | 7.3 | 6.8 | 44.7 | 0.9 | 1.6 | 0.0 | 46.0 | 62.5 | 62.5 | 0.0 |

1- Incineration onsite using private incinerator

2- incineration offsite using central incinerator

3- haphazard burning without incinerator

4- handing to a contractor

5- transport to a hazardous medical waste site

6- others

Table No. (23): Amount of generated hazardous medical waste, daily averages, percentage of medical waste final disposal method and available special containers for the collection of disposable sharp objects and radioactive waste in other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Amount of hazardous medical waste Kg\6months | Average amount of hazardous waste generated per day Kg\day | % of final disposal method of hazardous waste | | | | | | % of | |
|--------------|--|--|---|------|-------|-----|------|-----|--|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | Available Containers For disposable sharps | Available leaded containers for radioactive waste |
| Ninawa | 7650.0 | 2.6 | 42.8 | 9.5 | 42.9 | 0.0 | 4.8 | 0.0 | 76.2 | 0.0 |
| Karkook | 12058.0 | 2.7 | 86.6 | 6.7 | 6.7 | 0.0 | 0.0 | 0.0 | 36.7 | 0.0 |
| Diala | 902.4 | 2.0 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 151.2 | 1.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 51354.5 | 3.0 | 63.5 | 9.6 | 14.8 | 0.9 | 8.6 | 2.6 | 72.2 | 0.0 |
| Babel | 9836.1 | 2.3 | 3.5 | 10.3 | 86.2 | 0.0 | 0.0 | 0.0 | 24.1 | 0.0 |
| Karbala | 10111.0 | 3.2 | 72.3 | 14.3 | 5.2 | 1.4 | 2.3 | 4.5 | 71.4 | 0.0 |
| Waset | 3452.5 | 3.3 | 57.1 | 28.6 | 14.3 | 0.0 | 0.0 | 0.0 | 24.9 | 0.0 |
| Saladin | 7182.3 | 3.2 | 12.4 | 31.3 | 43.8 | 0.0 | 12.5 | 0.0 | 93.8 | 0.0 |
| Najaf | 15915.1 | 5.1 | 0.0 | 42.9 | 57.1 | 0.0 | 0.0 | 0.0 | 71.4 | 0.0 |
| Qadeseya | 16496.2 | 4.6 | 35.0 | 13.0 | 52.0 | 0.0 | 0.0 | 0.0 | 56.0 | 0.0 |
| Muthana | 2991.3 | 1.3 | 46.6 | 0.0 | 40.0 | 0.0 | 6.7 | 6.7 | 0.0 | 0.0 |
| Thee Qar | 4646.8 | 1.7 | 37.6 | 6.8 | 55.6 | 0.0 | 0.0 | 0.0 | 66.7 | 0.0 |
| Misan | 1426.6 | 2.4 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 | 0.0 | 75.0 | 0.0 |
| Basra | 28401.9 | 4.6 | 92.7 | 0.0 | 4.9 | 0.0 | 2.4 | 0.0 | 22.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | |

| Governorate | Amount of hazardous medical waste Kg\6months | Average amount of hazardous waste generated per day Kg\day | % of final disposal method of hazardous waste | | | | | | % of | |
|-------------------|--|--|---|------|------|------|-----|-----|--|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | Available Containers For disposable sharps | Available leaded containers for radioactive waste |
| Sulimaneya | 626.4 | 4.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Erbil | 1891.9 | 4.2 | 0.0 | 50.0 | 25.0 | 25.0 | 0.0 | 0.0 | 80.0 | 0.0 |
| Dhook | 19042.4 | 5.1 | 42.3 | 20.6 | 30.5 | 0.0 | 0.0 | 6.6 | 96.0 | 0.0 |
| Total | 194136.6 | 3.1 | 52.2 | 12.4 | 29.3 | 0.5 | 3.9 | 1.7 | 58.0 | 0.0 |

1- Incineration onsite using private incinerator
3- haphazard burning without incinerator
5- dumping waste in the location

2- incineration offsite in a central incinerator
4- handing to municipal entity to burn or dump
6- others

Table No. (24): Percentage of medical waste transportation method, available special room or store for the collection of hazardous medical and radioactive material or waste and available records of such waste at State and private hospitals

by Governorate: 01/01/2008 30/06/2008

| Governorate | Type | % of: | | | | | |
|-------------|---------|-----------------------------|---------|--------------|--|---|--|
| | | Waste transportation method | | | Room or store for hazardous medical waste collection | Special store for radioactive Material or waste | Available record of amounts of Hazardous medical waste |
| | | Manual | By cart | No. of carts | | | |
| Ninawa | State | 35.7 | 78.6 | 42 | 28.6 | 14.3 | 50.0 |
| | Private | 100.0 | 0.0 | 0 | 33.3 | 0.0 | 33.3 |
| Karkook | State | 0.0 | 100.0 | 17 | 33.3 | 0.0 | 66.7 |
| | Private | 50.0 | 50.0 | 4 | 100.0 | 0.0 | 100.0 |
| Diala | State | 55.6 | 77.8 | 11 | 0.0 | 0.0 | 0.0 |
| | Private | 100.0 | 33.3 | 2 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 16.7 | 83.3 | 27 | 0.0 | 0.0 | 8.3 |
| | Private | 0.0 | 100.0 | 2 | 100.0 | 0.0 | 100.0 |
| Baghdad | State | 20.0 | 87.5 | 413 | 25.0 | 5.0 | 80.0 |
| | Private | 54.3 | 48.6 | 45 | 28.6 | 0.0 | 62.9 |
| Babel | State | 37.5 | 87.5 | 27 | 12.5 | 0.0 | 37.5 |
| | Private | 66.7 | 33.3 | 2 | 0.0 | 0.0 | 33.3 |
| Karbala | State | 20.0 | 100.0 | 56 | 0.0 | 0.0 | 100.0 |
| | Private | 50.0 | 50.0 | 2 | 50.0 | 0.0 | 50.0 |
| Waset | State | 22.2 | 77.8 | 114 | 22.2 | 0.0 | 55.6 |
| | Private | 0.0 | 100.0 | 2 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 0.0 | 100.0 | 24 | 11.1 | 0.0 | 22.2 |
| | Private | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 16.7 | 83.3 | 17 | 0.0 | 0.0 | 83.3 |
| | Private | 33.3 | 66.7 | 5 | 33.3 | 0.0 | 100.0 |

| Governorate | Type | % of: | | | | | |
|--------------|---------|-----------------------------|---------|--------------|--|---|--|
| | | Waste transportation method | | | Room or store for hazardous medical waste collection | Special store for radioactive Material or waste | Available record of amounts of Hazardous medical waste |
| | | Manual | By cart | No. of carts | | | |
| Qadeseya | State | 60.0 | 80.0 | 22 | 0.0 | 0.0 | 20.0 |
| | Private | 0.0 | 100.0 | 5 | 0.0 | 0.0 | 50.0 |
| Muthana | State | 0.0 | 100.0 | 36 | 0.0 | 0.0 | 25.0 |
| | Private | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 100.0 |
| Thee Qar | State | 12.5 | 87.5 | 62 | 37.5 | 0.0 | 50.0 |
| | Private | 100.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Misan | State | 0.0 | 100.0 | 42 | 0.0 | 0.0 | 66.7 |
| | Private | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 33.3 | 75.0 | 65 | 8.3 | 0.0 | 33.3 |
| | Private | 60.0 | 40.0 | 8 | 0.0 | 0.0 | 60.0 |
| Kurdistan R. | | | | | | | |
| Sulimaneya | State | 82.6 | 52.2 | 43 | 4.3 | 0.0 | 0.0 |
| | Private | 85.7 | 28.6 | 9 | 0.0 | 0.0 | 0.0 |
| Erbil | State | 58.8 | 58.8 | 38 | 0.0 | 0.0 | 5.9 |
| | Private | 83.3 | 100.0 | 16 | 0.0 | 0.0 | 0.0 |
| Dhook | State | 42.9 | 85.7 | 19 | 0.0 | 0.0 | 0.0 |
| | Private | 25.0 | 75.0 | 5 | 25.0 | 25.0 | 0.0 |
| Total | State | 33.1 | 80.2 | 1075 | 12.5 | 2.0 | 39.7 |
| | Private | 60.0 | 50.0 | 107 | 21.3 | 1.3 | 45.0 |

Table No. (25): Percentage of medical waste transportation method, available special room or store for the collection of hazardous medical and radioactive material or waste and available records of such waste at other health facilities (except hospitals) by Governorate :

01/01/2008 – 30/06/2008

| Governorate | % of | | | | | |
|--------------|-----------------------------|-------------|--------------|--|---|---|
| | Waste transportation method | | | Available room or store for medical waste collection | Available store for radioactive material or waste | Available record for amounts of hazardous medical waste |
| | by hand | By cart | No. of carts | | | |
| Ninawa | 82.0 | 22.0 | 15 | 0.0 | 0.0 | 10.0 |
| Karkook | 74.3 | 28.6 | 12 | 5.7 | 0.0 | 51.4 |
| Diala | 81.3 | 43.8 | 11 | 0.0 | 0.0 | 0.0 |
| Anbar | 79.2 | 20.8 | 8 | 0.0 | 0.0 | 0.0 |
| Baghdad | 86.5 | 17.7 | 81 | 5.7 | 0.0 | 31.9 |
| Babel | 85.7 | 17.1 | 11 | 0.0 | 0.0 | 5.7 |
| Karbala | 78.3 | 39.1 | 22 | 0.0 | 0.0 | 47.8 |
| Waset | 81.8 | 18.2 | 5 | 0.0 | 0.0 | 0.0 |
| Saladin | 73.7 | 26.3 | 8 | 0.0 | 0.0 | 5.3 |
| Najaf | 77.3 | 22.7 | 6 | 0.0 | 0.0 | 50.0 |
| Qadeseya | 89.7 | 10.3 | 3 | 0.0 | 0.0 | 6.9 |
| Muthana | 71.4 | 28.6 | 7 | 0.0 | 0.0 | 19.0 |
| Thee Qar | 74.2 | 25.8 | 12 | 0.0 | 0.0 | 32.3 |
| Misan | 74.1 | 55.6 | 50 | 0.0 | 0.0 | 7.4 |
| Basra | 91.5 | 10.6 | 6 | 2.1 | 0.0 | 2.1 |
| Kurdistan R. | | | | | | |
| Sulimaneya | 92.9 | 12.5 | 14 | 0.0 | 0.0 | 0.0 |
| Erbil | 75.8 | 51.5 | 30 | 3.0 | 0.0 | 0.0 |
| Dhook | 88.6 | 28.6 | 12 | 0.0 | 0.0 | 2.9 |
| Total | 83.2 | 23.7 | 313 | 1.8 | 0.0 | 17.0 |

Table No. (26): Amount and daily average of ordinary waste generated, percentage of final disposal method, color of bags and containers used for collection and available records of such waste at State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | Amount of regular waste in 6 months (Kg.) | Average amount of regular waste per day. (Kg.) | % of: | | | | | | | | | | | | | | Available record of regular waste |
|-------------|---------|---|--|-----------------------------------|------|-------|-------|------|------|-----|--|------|-------|-------|------|-------|-------|-----------------------------------|
| | | | | Disposal method of regular weight | | | | | | | Color of bags/containers used for regular waste collection | | | | | | | |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Black | Red | Green | white | Pink | blue | Other | |
| Ninawa | State | 176729.3 | 69.4 | 29.0 | 0.0 | 14.3 | 57.1 | 0.0 | 0.0 | 0.0 | 81.8 | 0.0 | 0.0 | 0.0 | 9.1 | 9.1 | 0.0 | 42.9 |
| | Private | 6370.0 | 35.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | State | 143783.6 | 131.7 | 17.0 | 0.0 | 0.0 | 83.3 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 |
| | Private | 23660.0 | 65.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 |
| Diala | State | 29123.6 | 26.7 | 0.0 | 17.0 | 50.0 | 33.3 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 16.7 | 0.0 |
| | Private | 1820.0 | 10.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Anbar | State | 402220.0 | 422.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 7280.0 | 40.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Baghdad | State | 1548248.9 | 233.9 | 15.0 | 2.6 | 2.6 | 74.4 | 0.0 | 0.0 | 5.1 | 97.4 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 0.0 | 48.7 |
| | Private | 114851.1 | 18.0 | 0.0 | 2.9 | 0.0 | 85.7 | 8.6 | 2.9 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.7 |
| Babel | State | 122493.3 | 84.1 | 38.0 | 0.0 | 0.0 | 62.5 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.5 |
| | Private | 9647.8 | 17.7 | 0.0 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | State | 70434.0 | 77.4 | 20.0 | 0.0 | 0.0 | 80.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 80.0 |
| | Private | 10010.0 | 27.5 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 |
| Waset | State | 62244.0 | 38.0 | 33.0 | 0.0 | 22.2 | 44.4 | 0.0 | 0.0 | 0.0 | 77.8 | 22.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 44.4 |
| | Private | 2366.0 | 13.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 85365.3 | 58.6 | 0.0 | 0.0 | 12.5 | 62.5 | 12.5 | 12.5 | 0.0 | 87.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 |
| | Private | 4550.0 | 25.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 216576.4 | 198.3 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 0.0 | 33.3 |
| | Private | 19475.8 | 35.7 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Qadeseya | State | 239848.7 | 263.6 | 29.0 | 0.0 | 0.0 | 71.4 | 0.0 | 0.0 | 0.0 | 85.7 | 0.0 | 0.0 | 0.0 | 0.0 | 13.4 | 0.0 | 14.3 |
| | Private | 8736.0 | 24.0 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Muthana | State | 309400.0 | 425.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 1456.0 | 8.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | State | 283556.0 | 194.8 | 0.0 | 0.0 | 0.0 | 75.0 | 12.5 | 12.5 | 0.0 | 75.0 | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 25.0 |
| | Private | 546.0 | 3.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Governorate | Type | Amount of regular waste in 6 months (Kg.) | Average amount of regular waste per day. (Kg.) | % of: | | | | | | | | | | | | | | Available record of regular waste |
|---------------------|---------|---|--|-----------------------------------|-----|-----|-------|------|------|-----|--|-----|-------|-------|------|-------|-------|-----------------------------------|
| | | | | Disposal method of regular weight | | | | | | | Color of bags/containers used for regular waste collection | | | | | | | |
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Black | Red | Green | white | Pink | blue | Other | |
| Misan | State | 314856.4 | 288.3 | 33.0 | 0.0 | 0.0 | 66.7 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 295757.3 | 153.4 | 25.0 | 0.0 | 0.0 | 58.3 | 17.6 | 16.7 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 |
| | Private | 30940.0 | 34.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40.0 |
| Kurdistan R. | | | | | | | | | | | | | | | | | | |
| Sulimanya | State | 18200.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | State | 156219.7 | 171.7 | 17.0 | 0.0 | 0.0 | 50.0 | 33.3 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | State | 254163.0 | 199.5 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 10556.0 | 14.5 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | State | 4729255.4 | 173.8 | 16.4 | 1.3 | 5.9 | 70.1 | 3.7 | 1.3 | 1.3 | 89.7 | 2.0 | 1.3 | 1.6 | 0.8 | 3.2 | 1.3 | 31.5 |
| | Private | 252264.7 | 24.7 | 0.0 | 4.8 | 3.2 | 81.7 | 4.8 | 5.6 | 0.0 | 98.4 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 22.2 |

- 1- incineration onsite using private incinerator
- 3- haphazard burning without incinerator
- 5- handing waste to a contractor
- 7- others

- 2- incineration offsite in a central incinerator
- 4- handing waste to municipal entity to burn or dump
- 6- handing waste to a specialized or official entity

Table No. (27): Amount and daily average of ordinary waste generated , percentage of final disposal method, color of bags and containers used for collection and available records for such waste at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Amount of regular waste in 6 months (Kg.) | Average amount of regular waste per day. (Kg.) | % of: | | | | | | | | | | | | | | | | | Available record of regular waste |
|--------------|---|--|-----------------------------------|------|------|-------|-----|------|------|------|--|--------|-----|-------|------|------|------|-------|------|-----------------------------------|
| | | | Disposal method of regular weight | | | | | | | | Color of bags/containers used for regular waste collection | | | | | | | | | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Black | yellow | Red | white | Pink | blue | Gray | Other | | |
| Ninawa | 22140.0 | 7.4 | 15.0 | 0.0 | 35.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 56.3 | 6.3 | 0.0 | 6.3 | 6.3 | 25.0 | 0.0 | 0.0 | 5.0 | |
| Karkook | 23535.0 | 5.2 | 46.7 | 0.0 | 6.7 | 46.7 | 0.0 | 0.0 | 0.0 | 0.0 | 93.3 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 26.7 | |
| Diala | 2250.0 | 5.0 | 33.3 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.0 | 67.0 | 0.0 | 0.0 | |
| Anbar | 2250.0 | 15.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Baghdad | 139668.0 | 8.2 | 15.8 | 4.4 | 8.8 | 64.9 | 0.9 | 0.0 | 0.0 | 5.3 | 92.0 | 1.8 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 5.3 | 17.5 | |
| Babel | 21445.5 | 4.9 | 0.0 | 10.3 | 13.8 | 75.9 | 0.0 | 0.0 | 0.0 | 0.0 | 93.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 | 0.0 | 0.0 | |
| Karbala | 20475.0 | 6.5 | 19.0 | 4.8 | 0.0 | 71.4 | 0.0 | 0.0 | 0.0 | 4.8 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 61.9 | |
| Waset | 4504.5 | 4.3 | 42.9 | 0.0 | 14.3 | 28.6 | 0.0 | 0.0 | 0.0 | 14.3 | 83.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.0 | 0.0 | 0.0 | |
| Saladin | 16605.0 | 7.4 | 6.3 | 0.0 | 31.3 | 31.3 | 0.0 | 31.0 | 0.0 | 0.0 | 93.8 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 0.0 | 4.8 | 0.0 | |
| Najaf | 62559.0 | 19.9 | 0.0 | 0.0 | 4.8 | 90.5 | 0.0 | 0.0 | 0.0 | 4.8 | 90.5 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.3 | |
| Qadeseya | 52056.0 | 14.5 | 8.3 | 4.2 | 16.7 | 70.8 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Muthana | 6637.5 | 3.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Thee Qar | 13500.0 | 5.0 | 27.8 | 5.6 | 38.9 | 27.8 | 0.0 | 0.0 | 0.0 | 0.0 | 83.3 | 5.6 | 6.0 | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 | 16.7 | |
| Misan | 9450.0 | 15.8 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | |
| Basra | 128412.0 | 20.9 | 58.5 | 0.0 | 2.4 | 22.0 | 0.0 | 0.0 | 17.1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | |
| Kurdistan R. | | | | | | | | | | | | | | | | | | | | |

| Governorate | Amount of regular waste in 6 months (Kg.) | Average amount of regular waste per day. (Kg.) | % of: | | | | | | | | | | | | | | | | | Available record of regular waste |
|-------------------|---|--|-----------------------------------|-----|------|-------|-----|-----|-----|-----|--|--------|-----|-------|------|------|------|-------|------|-----------------------------------|
| | | | Disposal method of regular weight | | | | | | | | Color of bags/containers used for regular waste collection | | | | | | | | | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Black | yellow | Red | white | Pink | blue | Gray | Other | | |
| Sulimaneya | 1500.0 | 10.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 3748.5 | 8.3 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 28425.0 | 7.6 | 12.0 | 0.0 | 0.0 | 88.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 559161.0 | 9.4 | 20.9 | 5.7 | 10.9 | 59.4 | 0.3 | 1.2 | 1.8 | 2.6 | 91.4 | 1.6 | 0.3 | 0.3 | 0.3 | 2.7 | 3.1 | 2.1 | 13.0 | |

- 1- incineration onsite using private incinerator
- 3- haphazard burning without incinerator
- 5- dumping waste in the location
- 7- handing waste to a specialized or official entity

- 2- incineration offsite in a central incinerator
- 4- handing waste to municipal entity to burn or dump
- 6- handing waste to a contractor
- 8- others

Table No. (28): Number of State and private hospitals committed to segregation regulations, daily average amount of hazardous medical and ordinary waste, number of large containers specified for final collection of ordinary and hazardous medical waste and the average frequency of emptying containers by Governorate :: 1/1/2008 – 30/6/2008

| Governorate | Type of hospital | Total No. of hospitals | No. of State and private hospitals Committed to segregation | Average amount of hazardous medical waste per day Kg\hospital | Average amount of ordinary waste per day Kg./hospital | No. of specified containers of final collection of ordinary and hazardous medical waste | Average frequency of evacuation of large containers (every 2 weeks) |
|-------------|------------------|------------------------|---|---|---|---|---|
| Ninawa | State | 14 | 14 | 15.7 | 69.4 | 12 | 4 |
| | Private | 3 | 1 | 5.0 | 35.0 | 0 | 0 |
| Karkook | State | 6 | 6 | 23.3 | 131.7 | 6 | 4 |
| | Private | 2 | 2 | 10.0 | 65.0 | 2 | 7 |
| Diala | State | 9 | 6 | 13.1 | 26.7 | 4 | 3 |
| | Private | 3 | 1 | 1.0 | 10.0 | 0 | 0 |
| Anbar | State | 12 | 5 | 18.6 | 442.0 | 5 | 4 |
| | Private | 1 | 1 | 4.0 | 40.0 | 1 | 5 |
| Baghdad | State | 39 | 37 | 48.3 | 225.8 | 27 | 3 |
| | Private | 35 | 35 | 5.0 | 18.0 | 30 | 4 |
| Babel | State | 8 | 8 | 26.1 | 84.1 | 8 | 5 |
| | Private | 3 | 3 | 12.0 | 17.7 | 3 | 3 |
| Karbala | State | 5 | 5 | 40.8 | 77.4 | 5 | 4 |
| | Private | 2 | 2 | 12.5 | 27.5 | 2 | 9 |
| Waset | State | 9 | 9 | 14.9 | 38.0 | 6 | 3 |
| | Private | 1 | 1 | 4.0 | 13.0 | 0 | 0 |
| Saladin | State | 9 | 8 | 17.3 | 58.6 | 8 | 3 |
| | Private | 1 | 1 | 10.0 | 25.0 | 1 | 5 |
| Najaf | State | 6 | 6 | 56.7 | 198.3 | 4 | 4 |
| | Private | 3 | 3 | 11.3 | 35.7 | 1 | 0 |
| Qadeseya | State | 5 | 5 | 59.0 | 229.0 | 5 | 7 |
| | Private | 2 | 2 | 12.5 | 24.0 | 2 | 9 |
| Muthana | State | 4 | 4 | 52.8 | 425.0 | 4 | 12 |
| | Private | 1 | 1 | 3.0 | 8.0 | 1 | 8 |

| Governorate | Type of hospital | Total No. of hospitals | No. of State and private hospitals Committed to segregation | Average amount of hazardous medical waste per day Kg\hospital | Average amount of ordinary waste per day Kg./hospital | No. of specified containers of final collection of ordinary and hazardous medical waste | Average frequency of evacuation of large containers (every 2 weeks) |
|---------------------|------------------|------------------------|---|---|---|---|---|
| Thee Qar | State | 8 | 8 | 27.0 | 194.8 | 7 | 10 |
| | Private | 1 | 1 | | 3.0 | 1 | 3 |
| Misan | State | 6 | 6 | 45.3 | 288.3 | 5 | 3 |
| | Private | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| Basra | State | 12 | 12 | 38.5 | 135.4 | 10 | 7 |
| | Private | 5 | 5 | 5.4 | 34.0 | 4 | 6 |
| Kurdistan R. | | | | | | | |
| Sulimaneya | State | 21 | 1 | 50.0 | 100.0 | 0 | 0 |
| | Private | 7 | 0 | 0.0 | 0.0 | 0 | 0 |
| Erbil | State | 17 | 5 | 44.2 | 136.0 | 5 | 7 |
| | Private | 6 | 0 | 0.0 | 0.0 | 0 | 0 |
| Dhook | State | 7 | 7 | 42.9 | 176.7 | 6 | 6 |
| | Private | 4 | 4 | 12.0 | 14.5 | 4 | 6 |
| Total | State | 197 | 125 | 35.6 | 168.7 | 127 | 4.9 |
| | Private | 80 | 63 | 6.0 | 20.6 | 52 | 3.6 |

N.B. There is no waste segregation in private hospitals in Sulimaneya and Erbil Governorates.

Table No. (29): Number of other health facilities (except hospitals) committed to segregation regulations, daily average amount of hazardous medical and ordinary waste, number of large containers specified for final collection of ordinary and hazardous medical waste and the average frequency of emptying containers by Governorate : 01/01/2008 – 30/06/2008

| Governorate | NO of health facilities (except hospitals) implementing segregation | Average amount of hazardous medical waste generated per day. Kg./health facility | Average amount of ordinary waste per day Kg./institute | No. of specified containers of final collection of ordinary and hazardous medical waste | Average frequency of evacuation of large containers (every 2 weeks) |
|--------------|---|--|--|---|---|
| Ninawa | 20 | 2.6 | 7.4 | 14 | 3 |
| Karkook | 30 | 2.7 | 5.2 | 22 | 5 |
| Diala | 3 | 2.0 | 5.0 | 0 | 0 |
| Anbar | 1 | 1.0 | 15.0 | 1 | 1 |
| Baghdad | 114 | 2.8 | 8.2 | 55 | 2 |
| Babel | 29 | 2.3 | 4.9 | 18 | 2 |
| Karbala | 21 | 3.2 | 6.5 | 17 | 5 |
| Waset | 7 | 3.3 | 4.3 | 2 | 1 |
| Saladin | 15 | 3.2 | 7.3 | 2 | 0 |
| Najaf | 21 | 5.0 | 19.9 | 0 | 0 |
| Qadeseya | 24 | 4.6 | 14.5 | 18 | 8 |
| Muthana | 15 | 1.3 | 3.0 | 8 | 4 |
| Thee Qar | 18 | 1.7 | 5.0 | 5 | 2 |
| Misan | 4 | 2.4 | 15.8 | 0 | 0 |
| Basra | 41 | 4.6 | 20.9 | 30 | 5 |
| Kurdistan R. | | | | | |
| Sulimaneya | 1 | 4.0 | 10.0 | 0 | 0 |
| Erbil | 3 | 3.4 | 8.3 | 3 | 8 |
| Dhook | 25 | 5.1 | 7.6 | 23 | 5 |
| Total | 392 | 3.1 | 9.4 | 218 | 2.83 |

Table No.(30): Number of State and private hospitals not committed to segregation regulations, amount and daily average of generated waste, percentage of available records of generated waste amounts, transportation methods and number of transportation vehicles by Governorate :1/1/2008 – 30/6/2008

| Governorate | Type | No. hospitals not committed to segregation | Amount of generated waste in hospitals not committed to segregation (Kg.*6 months) | Average daily amount of generated waste(Kg./day) | Record of the amount of generated waste | percentage | | | | | No. of carts |
|-------------|---------|--|--|--|---|-----------------|------------|-----------------------|--------|----------|--------------|
| | | | | | | Disposal method | | transportation method | | | |
| | | | | | | Bags | Containers | Others | Manual | In carts | |
| Ninawa | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| | private | 2 | 26572.0 | 73.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 |
| Karkook | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Diala | State | 3 | 8190.0 | 15.0 | 0.0 | 0.0 | 100.0 | 0.0 | 33.3 | 66.7 | 2 |
| | private | 2 | 1456.0 | 4.0 | 50.0 | 50.0 | 50.0 | 0.0 | 66.7 | 33.3 | 1 |
| Anbar | State | 7 | 80644.2 | 63.3 | 0.0 | 57.1 | 14.3 | 28.6 | 28.6 | 71.4 | 5 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Baghdad | State | 2 | 3094.0 | 17.0 | 0.0 | 50.0 | 50.0 | 0.0 | 50.0 | 50.0 | 1 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Babel | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Karbala | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Waset | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Saladin | State | 1 | 7280.0 | 40.0 | 100.0 | 50.0 | 50.0 | 0.0 | 0.0 | 100.0 | 1 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Najaf | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Al Qadeseya | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |

| Governorate | Type | No. hospitals not committed to segregation | Amount of generated waste in hospitals not committed to segregation (Kg.*6 months) | Average daily amount of generated waste(Kg./day) | Record of the amount of generated waste | percentage | | | | | No. of carts |
|---------------------|---------|--|--|--|---|-----------------|------------|-----------------------|--------|----------|--------------|
| | | | | | | Disposal method | | transportation method | | | |
| | | | | | | Bags | Containers | Others | Manual | In carts | |
| Al Muthana | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| Thee Qar | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| Misan | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| Basra | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| Kurdistan R. | | | | | | | | | | | |
| Sulimaneya | State | 20 | 38.0301 | 90.7 | 0.0 | 62.5 | 37.5 | 0.0 | 62.1 | 37.9 | 10 |
| | private | 17 | 19019.0 | 20.9 | 0.0 | 77.8 | 22.2 | 0.0 | 75.0 | 25.0 | 2 |
| Erbil | State | 12 | 92820.0 | 42.5 | 0.0 | 55.0 | 45.0 | 0.0 | 53.3 | 46.7 | 6 |
| | private | 6 | 35490.0 | 32.5 | 0.0 | 54.0 | 45.5 | 0.0 | 45.5 | 54.5 | 6 |
| Dhook | State | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| | private | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| Total | State | 45 | 522176.2 | 53.7 | 2.3 | 54.8 | 54.8 | 4.6 | 50.7 | 49.3 | 25 |
| | private | 17 | 82537.0 | 32.6 | 5.9 | 68.9 | 68.9 | 0.0 | 66.6 | 33.4 | 9 |

Table No. (31): number of other health facilities (except hospitals) not committed to segregation and amount, daily average of generated waste and percentage of availability of records for documentation of amounts of generated waste, methods of collection and transportation of waste and number of transportation vehicle by Governorates: 1/1/2008 – 30/6/2008

| Governorate | No. of facilities not committed to segregation | Amount of generated waste in hospitals not committed to segregation (Kg.*6 months) | Average daily amount of generated waste(Kg./day) | Record of the amount of generated waste | percentage | | | | | No. of carts |
|--------------|--|--|--|---|-----------------|-------------|-----------------------|-------------|-------------|--------------|
| | | | | | Disposal method | | transportation method | | | |
| | | | | | Bags | Containers | Others | Manual | In carts | |
| Ninawa | 30 | 39600 | 8.8 | 0.0 | 25.0 | 75.0 | 0.0 | 76.7 | 23.3 | 7 |
| Karkook | 5 | 5550 | 7.4 | 0.0 | 20.0 | 80.0 | 0.0 | 60.0 | 40.0 | 2 |
| Diala | 13 | 10335 | 5.3 | 0.0 | 42.1 | 47.4 | 10.5 | 62.5 | 37.5 | 6 |
| Anbar | 23 | 38640 | 11.2 | 0.0 | 65.2 | 26.1 | 8.7 | 78.3 | 21.7 | 5 |
| Baghdad | 28 | 37800 | 9.0 | 3.6 | 65.6 | 34.4 | 0.0 | 86.2 | 13.8 | 4 |
| Babel | 6 | 4500 | 5.0 | 0.0 | 33.3 | 50.0 | 16.7 | 83.3 | 16.7 | 1 |
| Karbala | 2 | 1950 | 6.5 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 |
| Waset | 15 | 12600 | 5.6 | 0.0 | 13.3 | 53.3 | 33.3 | 86.7 | 13.3 | 2 |
| Saladin | 4 | 3600 | 6.0 | 0.0 | 50.0 | 25.0 | 25.0 | 100.0 | 0.0 | 0 |
| Najaf | 1 | 2250 | 15.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0 |
| Al Qadeseya | 4 | 7800 | 10.4 | 0.0 | 60.0 | 40.0 | 0.0 | 100.0 | 0.0 | 0 |
| Al Muthana | 6 | 1800 | 2.0 | 0.0 | 83.3 | 16.7 | 0.0 | 83.3 | 16.7 | 1 |
| Thee Qar | 13 | 11310 | 5.8 | 46.2 | 75.0 | 18.8 | 6.3 | 76.9 | 23.1 | 3 |
| Misan | 23 | 49335 | 14.3 | 0.0 | 73.3 | 26.7 | 0.0 | 61.3 | 38.7 | 12 |
| Basra | 6 | 15120 | 16.8 | 0.0 | 83.3 | 16.7 | 0.0 | 100.0 | 0.0 | 0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 57 | 117135 | 13.7 | 0.0 | 86.9 | 11.5 | 1.6 | 87.9 | 12.1 | 7 |
| Erbil | 30 | 52650 | 11.7 | 0.0 | 48.8 | 51.2 | 0.0 | 59.0 | 41.0 | 13 |
| Dhook | 10 | 11850 | 7.9 | 0.0 | 53.8 | 46.2 | 0.0 | 83.3 | 16.7 | 2 |
| Total | 277 | 423825 | 9.0 | 2.5 | 59.7 | 35.9 | 4.4 | 78.5 | 21.5 | 65 |

Table No. (32): Number of large containers specified for final collection of generated waste (in State and private hospitals not committed to regulation of segregation) and the average frequency of their evacuation and percentage of final disposal method in State and private hospitals by Governorate: 1/1/2008 – 30/6/2008

| Governorate | Type | No. of hospitals not committed to segregation | No. of large containers for collection of generated waste | Frequency of large containers evacuation (every 2 weeks) | Percentage of disposal methods of unsegregated waste | | | | | |
|-------------|---------|---|---|--|--|-------|------|------|-----|------|
| | | | | | 1 | 2 | 3 | 4 | 5 | 6 |
| Ninawa | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 2 | 2 | 1.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | State | 3 | 1 | 1.0 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 |
| | private | 2 | 1 | 1.0 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 7 | 3 | 1.0 | 42.9 | 0.0 | 42.9 | 14.3 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | State | 2 | 0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Babel | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 1 | 2 | 1.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Governorate | Type | No. of hospitals not committed to segregation | No. of large containers for collection of generated waste | Frequency of large containers evacuation (every 2 weeks) | Percentage of disposal methods of unsegregated waste | | | | | |
|---------------------|---------|---|---|--|--|------|------|------|------|------|
| | | | | | 1 | 2 | 3 | 4 | 5 | 6 |
| Al Muthana | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | State | 20 | 22 | 6.0 | 7.7 | 0.0 | 11.5 | 69.2 | 0.0 | 11.5 |
| | private | 7 | 2 | 2.0 | 0.0 | 0.0 | 0.0 | 71.4 | 0.0 | 28.6 |
| Erbil | State | 12 | 55 | 4.0 | 26.7 | 0.0 | 6.7 | 66.7 | 0.0 | 0.0 |
| | private | 6 | 13 | 80 | 0.0 | 0.0 | 0.0 | 80.0 | 20.0 | 0.0 |
| Dhook | State | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | State | 45 | 83 | 2.6 | 21.0 | 0.0 | 18.4 | 54.2 | 0.0 | 6.4 |
| | private | 17 | 18 | 3.0 | 5.9 | 17.6 | 0.0 | 57.6 | 7.1 | 11.8 |

1- Incineration onsite using private incinerator 2- incineration offsite using central incinerator 3- haphazard burning without incinerator

4- handing waste to municipal entity to burn or dump 5- handing to a contractor 6- handing to a specialized or formal entity

Table No. (33): Number of large containers specified for final collection of generated waste in health facilities not committed to regulation of segregation and the average frequency of their evacuation and percentage of final disposal method in health facilities (except hospitals) by Governorate: 1/1/2008 – 30/6/2008

| Governorate | No. of facilities not committed to segregation | No. of large containers for collection of generated waste | Frequency of large containers evacuation (every 2 weeks) | Percentage of disposal methods of unsegregated waste | | | | | | |
|--------------|--|---|--|--|------------|-------------|-------------|------------|------------|------------|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ninawa | 30 | 38 | 2.0 | 0.0 | 8.0 | 44.7 | 36.8 | 0.0 | 10.5 | 0.0 |
| Karkook | 5 | 8 | 3.0 | 20.0 | 0.0 | 80.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | 13 | 2 | 0.0 | 7.7 | 0.0 | 84.6 | 0.0 | 0.0 | 0.0 | 7.7 |
| Anbar | 23 | 21 | 2.0 | 34.8 | 0.0 | 13.0 | 52.2 | 0.0 | 7.1 | 0.0 |
| Baghdad | 28 | 17 | 2.0 | 28.6 | 3.6 | 21.4 | 28.6 | 3.6 | 0.0 | 7.1 |
| Babel | 6 | 6 | 3.0 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 |
| Karbala | 2 | 2 | 2.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 |
| Waset | 15 | 2 | 1.0 | 37.5 | 0.0 | 31.3 | 30.5 | 0.7 | 0.0 | 0.0 |
| Saladin | 4 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 75.0 | 0.0 | 0.0 |
| Najaf | 1 | 0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 5 | 5 | 9.0 | 40.0 | 20.0 | 20.0 | 20.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 6 | 4 | 7.0 | 16.7 | 16.7 | 50.0 | 16.6 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 13 | 20 | 3.0 | 17.3 | 9.7 | 33.0 | 40.0 | 0.0 | 0.0 | 0.0 |
| Misan | 23 | 3 | 1.0 | 95.7 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 6 | 5 | 3.0 | 83.3 | 0.0 | 0.0 | 16.7 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 57 | 15 | 1.0 | 0.0 | 0.0 | 13.9 | 67.5 | 0.0 | 18.6 | 0.0 |
| Erbil | 30 | 54 | 5.0 | 10.0 | 0.0 | 23.3 | 66.7 | 0.0 | 0.0 | 0.0 |
| Dhook | 10 | 8 | 3.0 | 18.2 | 0.0 | 0.0 | 81.8 | 0.0 | 0.0 | 0.0 |
| Total | 277 | 211 | 2.6 | 23.0 | 3.4 | 24.9 | 39.6 | 1.6 | 5.9 | 1.6 |

1- Incineration onsite using private incinerator 2- incineration offsite using central incinerator 3- haphazard burning without incinerator

4- handing waste to municipal entity to burn or dump 5- handing to a contractor 6- handing to a specialized or formal entity 7- others

Table No. (34): Number of service workers in charge of waste collection, transportation and isolation and No. of training courses and percentage of health facilities whose cadres are trained and workers vaccinated against occupational diseases and No. and percentage of cases of viral hepatitis in State and private hospitals by Governorate: 1/1/2008 – 30/6/2008

| Governorate | Type | No. of workers in charge of waste collection, transportation and isolation | Percentage of trainees at health facilities | No. of training courses | Percentage of workers vaccinated against occupational diseases | Percentage of diagnosed cases of viral hepatitis in hospitals | No. of cases of infectious hepatitis | Percentage of cases of viral hepatitis |
|-------------|---------|--|---|-------------------------|--|---|--------------------------------------|--|
| Ninawa | State | 134 | 42.9 | 9 | 71.4 | 14.3 | 2 | 1.5 |
| | private | 10 | 0.0 | 0 | 33.3 | 33.3 | 1 | 10.0 |
| Karkook | State | 66 | 50.0 | 14 | 66.7 | 0.0 | 0 | 0.0 |
| | private | 6 | 50.0 | 1 | 100.0 | 0.0 | 0 | 0.0 |
| Diala | State | 156 | 33.3 | 5 | 11.1 | 0.0 | 0 | 0.0 |
| | private | 10 | 66.7 | 8 | 0.0 | 0.0 | 0 | 0.0 |
| Anbar | State | 228 | 16.7 | 3 | 50.0 | 8.3 | 1 | 0.4 |
| | private | 2 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 |
| Baghdad | State | 448 | 64.1 | 53 | 53.8 | 0.0 | 0 | 0.0 |
| | private | 130 | 28.6 | 20 | 68.6 | 0.0 | 0 | 0.0 |
| Babel | State | 138 | 62.5 | 13 | 62.5 | 37.5 | 5 | 3.6 |
| | private | 9 | 0.0 | 0 | 33.3 | 0.0 | 0 | 0.0 |
| Karbala | State | 107 | 80.0 | 10 | 80.0 | 0.0 | 0 | 0.0 |
| | private | 23 | 50.0 | 3 | 50.0 | 50.0 | 1 | 4.4 |
| Waset | State | 71 | 33.3 | 5 | 44.4 | 0.0 | 0 | 0.0 |
| | private | 3 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 |
| Saladin | State | 110 | 22.2 | 10 | 77.8 | 0.0 | 0 | 0.0 |
| | private | 4 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 |
| Najaf | State | 22 | 33.3 | 5 | 66.7 | 0.0 | 0 | 0.0 |
| | private | 6 | 100.0 | 4 | 33.3 | 0.0 | 0 | 0.0 |

| Governorate | Type | No. of workers in charge of waste collection, transportation and isolation | Percentage of trainees at health facilities | No. of training courses | Percentage of workers vaccinated against occupational diseases | Percentage of diagnosed cases of viral hepatitis in hospitals | No. of cases of infectious hepatitis | Percentage of cases of viral hepatitis |
|---------------------|---------|--|---|-------------------------|--|---|--------------------------------------|--|
| Al Qadeseya | State | 96 | 0.0 | 0 | 60.0 | 0.0 | 0 | 0.0 |
| | private | 7 | 50.0 | 4 | 50.0 | 0.0 | 0 | 0.0 |
| Al Muthana | State | 374 | 25.0 | 1 | 100.0 | 0.0 | 0 | 0.0 |
| | private | 6 | 100.0 | 1 | 0.0 | 0.0 | 0 | 0.0 |
| Thee Qar | State | 558 | 25.0 | 3 | 62.5 | 12.5 | 1 | 0.2 |
| | private | 9 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 |
| Misan | State | 235 | 66.7 | 8 | 66.7 | 0.0 | 0 | 0.0 |
| | private | 0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 |
| Basra | State | 68 | 33.3 | 10 | 41.7 | 0.0 | 0 | 0.0 |
| | private | 27 | 20.0 | 2 | 20.0 | 0.0 | 0 | 0.0 |
| Kurdistan R. | | | | | | | | |
| Sulimaneya | State | 617 | 8.7 | 4 | 13.0 | 0.0 | 0 | 0.0 |
| | private | 42 | 14.3 | 1 | 28.6 | 0.0 | 0 | 0.0 |
| Erbil | State | 253 | 6.3 | 1 | 35.3 | 5.9 | 8 | 3.2 |
| | private | 28 | 0.0 | 0 | 16.7 | 0.0 | 6 | 21.4 |
| Dhook | State | 31 | 14.3 | 1 | 71.4 | 14.3 | 1 | 3.2 |
| | private | 18 | 0.0 | 0 | 50.0 | 0.0 | 0 | 0.0 |
| Total | State | 3712 | 35.5 | 155 | 51.1 | 4.6 | 18 | 0.5 |
| | private | 339 | 26.2 | 44 | 46.3 | 2.5 | 8 | 2.4 |

Table No. (35): Number of workers in charge of waste collection, transportation and storage, number of training courses attended, percentage of health facilities where all cadres and workers are trained and vaccinated against occupational disease and hepatitis B and number and percentage of accidents at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | No. of workers in charge of waste collection, transportation and isolation | Percentage of trainees at health facilities | No. of training courses | Percentage of vaccinated workers against occupational diseases | Percentage of cases of viral hepatitis in health facilities | No. of cases of viral hepatitis | Percentage of cases of viral hepatitis |
|--------------------|---|--|--------------------------------|---|--|--|---|
| Ninawa | 133 | 4.0 | 2 | 68.0 | 0.0 | 0 | 0.0 |
| Karkook | 80 | 40.0 | 22 | 42.9 | 0.0 | 0 | 0.0 |
| Diala | 87 | 6.3 | 3 | 37.5 | 0.0 | 0 | 0.0 |
| Anbar | 49 | 4.2 | 1 | 75.0 | 0.0 | 0 | 0.0 |
| Baghdad | 526 | 29.8 | 62 | 70.2 | 0.0 | 0 | 0.0 |
| Babel | 98 | 0.0 | 0 | 77.1 | 0.0 | 0 | 0.0 |
| Karbala | 58 | 47.8 | 15 | 78.3 | 0.0 | 0 | 0.0 |
| Waset | 73 | 0.0 | 0 | 54.5 | 0.0 | 0 | 0.0 |
| Saladin | 88 | 0.0 | 0 | 26.3 | 5.3 | 1 | 1.1 |
| Najaf | 36 | 36.4 | 9 | 36.4 | 0.0 | 0 | 0.0 |
| Al Qadeseya | 115 | 10.3 | 10 | 48.3 | 3.5 | 2 | 1.7 |
| Al Muthana | 93 | 14.3 | 3 | 71.4 | 0.0 | 0 | 0.0 |
| Thee Qar | 138 | 35.5 | 21 | 71.0 | 3.2 | 1 | 0.7 |
| Misan | 78 | 25.9 | 10 | 18.5 | 0.0 | 0 | 0.0 |
| Basra | 132 | 4.3 | 3 | 48.9 | 0.0 | 0 | 0.0 |
| Kurdistan R. | | | | | | | |
| Sulimaneya | 291 | 1.8 | 2 | 28.6 | 0.0 | 0 | 0.0 |
| Erbil | 101 | 3.2 | 1 | 12.5 | 0.0 | 14 | 13.9 |
| Dhook | 104 | 5.7 | 2 | 68.6 | 5.7 | 3 | 2.9 |
| Total | 2280 | 16.4 | 166 | 54.8 | 0.7 | 21 | 0.9 |

Table No. (36): Percentage of availability and usage of protective personal equipment and clothes, available signage, guidelines or posters indicating medical waste hazards, presence of supervisory entity for waste management and availability of environmental guidelines implemented at medical waste disposal at State and private hospital by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | Percentage of | | | | |
|-------------|---------|---|--|--|--|---|
| | | Availability of clothes and personal protective equipment | Usage of clothes and personal protective equipment | Availability of signage, guidelines or posters | Presence of supervisory entity of waste management | Availability of implemented environmental guidelines for medical waste disposal |
| Ninawa | State | 85.7 | 85.7 | 78.6 | 100.0 | 78.6 |
| | private | 66.7 | 66.7 | 33.3 | 33.3 | 33.3 |
| Karkook | State | 100.0 | 100.0 | 100.0 | 83.3 | 100.0 |
| | private | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Diala | State | 88.9 | 77.8 | 66.7 | 100.0 | 22.2 |
| | private | 66.7 | 66.7 | 100.0 | 100.0 | 66.7 |
| Anbar | State | 91.7 | 83.3 | 33.3 | 66.7 | 50.0 |
| | private | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Baghdad | State | 90.0 | 90.0 | 65.0 | 100.0 | 92.5 |
| | private | 71.4 | 62.9 | 42.9 | 94.3 | 85.7 |
| Babel | State | 100.0 | 100.0 | 50.0 | 87.5 | 75.0 |
| | private | 100.0 | 100.0 | 0.0 | 33.3 | 33.3 |
| Karbala | State | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | private | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Waset | State | 77.8 | 77.8 | 66.7 | 100.0 | 100.0 |
| | private | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 88.9 | 88.9 | 66.7 | 77.8 | 4.4 |
| | private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 83.3 | 83.3 | 33.3 | 100.0 | 66.7 |
| | private | 66.7 | 66.7 | 100.0 | 100.0 | 100.0 |

| Governorate | Type | Percentage of | | | | |
|---------------------|---------|---|--|--|--|---|
| | | Availability of clothes and personal protective equipment | Usage of clothes and personal protective equipment | Availability of signage, guidelines or posters | Presence of supervisory entity of waste management | Availability of implemented environmental guidelines for medical waste disposal |
| Al Qadeseya | State | 60.0 | 60.0 | 60.0 | 100.0 | 40.0 |
| | private | 50.0 | 50.0 | 0.0 | 50.0 | 50.0 |
| Al Muthana | State | 100.0 | 100.0 | 50.0 | 100.0 | 25.0 |
| | private | 100.0 | 100.0 | 100.0 | 100.0 | 0.0 |
| Thee Qar | State | 87.5 | 75.0 | 87.5 | 87.5 | 25.0 |
| | private | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 |
| Misan | State | 66.7 | 66.7 | 100.0 | 100.0 | 100.0 |
| | private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 41.7 | 33.3 | 16.7 | 58.3 | 83.3 |
| | private | 60.0 | 60.0 | 40.0 | 40.0 | 40.0 |
| Kurdistan R. | | | | | | |
| Sulimaneya | State | 87.0 | 87.0 | 43.5 | 56.5 | 17.4 |
| | private | 85.7 | 85.7 | 71.4 | 71.4 | 28.6 |
| Erbil | State | 76.5 | 58.8 | 29.4 | 52.9 | 35.3 |
| | private | 100.0 | 66.7 | 33.3 | 33.3 | 0.0 |
| Dhook | State | 100.0 | 100.0 | 71.4 | 71.4 | 85.7 |
| | private | 100.0 | 100.0 | 25.0 | 75.0 | 100.0 |
| Total | State | 84.5 | 80.9 | 58.1 | 83.2 | 63.8 |
| | private | 77.5 | 71.3 | 48.8 | 75.0 | 63.7 |

Table No. (37): Percentage of availability and usage of protective personal equipment and clothes, available signage, guidelines or posters indicating medical waste hazards, presence of supervisory entity for waste management and availability of environmental guidelines implemented in medical waste disposal at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Percentage of | | | | |
|--------------|---|--|--|--|---|
| | Availability of clothes and personal protective equipment | Usage of clothes and personal protective equipment | Availability of signage, guidelines or posters | Presence of supervisory entity of waste management | Availability of implemented environmental guidelines for medical waste disposal |
| Ninawa | 14.0 | 10.0 | 54.0 | 44.0 | 46.0 |
| Karkook | 45.7 | 45.7 | 71.4 | 80.0 | 77.1 |
| Diala | 25.0 | 18.8 | 56.3 | 75.0 | 0.0 |
| Anbar | 0.0 | 0.0 | 50.0 | 54.2 | 41.7 |
| Baghdad | 31.2 | 25.5 | 49.6 | 90.1 | 72.3 |
| Babel | 85.7 | 82.9 | 8.6 | 54.3 | 62.9 |
| Karbala | 87.0 | 73.9 | 69.6 | 69.6 | 52.2 |
| Waset | 59.1 | 50.0 | 27.3 | 31.8 | 22.7 |
| Saladin | 42.1 | 21.1 | 26.3 | 36.8 | 31.6 |
| Najaf | 9.1 | 9.1 | 50.0 | 90.9 | 81.8 |
| Al Qadeseya | 31.0 | 31.0 | 34.5 | 72.4 | 41.4 |
| Al Muthana | 81.0 | 81.0 | 28.6 | 100.0 | 19.0 |
| Thee Qar | 61.3 | 58.1 | 54.8 | 64.5 | 16.1 |
| Misan | 18.5 | 14.8 | 66.7 | 22.2 | 40.7 |
| Basra | 6.4 | 6.4 | 10.6 | 12.8 | 19.1 |
| Kurdistan R. | | | | | |
| Sulimaneya | 44.6 | 44.6 | 44.6 | 39.3 | 16.1 |
| Erbil | 54.5 | 33.3 | 27.3 | 6.1 | 6.1 |
| Dhook | 71.4 | 68.6 | 37.1 | 42.9 | 57.1 |
| Total | 39.8 | 35.2 | 43.2 | 57.8 | 44.6 |

Table No. (38): Number of personal protective equipments and clothes available for workers at State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Overall | Ordinary apron | Radiation protection apron | Gloves | Boots | Masks | Protective goggles | Helmet | Head cover/hat |
|--------------|-------------|----------------|----------------------------|---------------|-------------|--------------|--------------------|------------|----------------|
| Ninawa | 119 | 34 | 0 | 4801 | 74 | 4194 | 0 | 0 | 15 |
| Karkook | 187 | 49 | 0 | 960 | 152 | 683 | 0 | 0 | 300 |
| Diala | 149 | 116 | 0 | 9714 | 136 | 9254 | 40 | 0 | 410 |
| Anbar | 545 | 248 | 0 | 11172 | 248 | 7132 | 0 | 7 | 362 |
| Baghdad | 1381 | 1102 | 34 | 18862 | 545 | 9454 | 17 | 6 | 1852 |
| Babel | 228 | 112 | 0 | 696 | 225 | 224 | 0 | 0 | 25 |
| Karbala | 166 | 26 | 0 | 302 | 14 | 10 | 0 | 1 | 2 |
| Waset | 70 | 2 | 0 | 59 | 16 | 9 | 0 | 0 | 2 |
| Saladin | 93 | 23 | 0 | 124 | 42 | 117 | 0 | 0 | 16 |
| Najaf | 23 | 1 | 0 | 2058 | 19 | 2049 | 0 | 3 | 5 |
| Al Qadeseya | 53 | 38 | 0 | 53 | 11 | 53 | 0 | 0 | 53 |
| Al Muthana | 336 | 44 | 0 | 386 | 248 | 444 | 0 | 0 | 331 |
| Thee Qar | 515 | 395 | 13 | 1416 | 0 | 1740 | 2 | 0 | 0 |
| Misan | 233 | 50 | 0 | 8340 | 1735 | 6999 | 0 | 0 | 17 |
| Basra | 30 | 2 | 0 | 51 | 18 | 37 | 0 | 2 | 49 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 810 | 481 | 17 | 17252 | 666 | 23012 | 220 | 220 | 935 |
| Erbil | 564 | 657 | 8 | 15725 | 449 | 13386 | 0 | 0 | 3196 |
| Dhook | 75 | 9 | 0 | 24740 | 34 | 9016 | 9 | 9 | 39 |
| Total | 5577 | 3389 | 77 | 116711 | 4632 | 87813 | 248 | 248 | 7609 |

**Table No. (39): Percentage of personal protective equipments and clothes available for workers at State and private hospitals by Governorate :
01/01/2008 – 30/06/2008**

| Governorate | Overall | Ordinary apron | Radiation protection apron | Gloves | Boots | Masks | Protective goggles | Helmet | Head cover/hat |
|---------------------|----------------|-----------------------|-----------------------------------|---------------|--------------|--------------|---------------------------|---------------|-----------------------|
| Ninawa | 2.1 | 1.0 | 0.0 | 4.1 | 1.6 | 4.8 | 0.0 | 0.0 | 0.2 |
| Karkook | 3.4 | 1.4 | 0.0 | 0.8 | 3.3 | 0.8 | 0.0 | 0.0 | 3.9 |
| Diala | 2.7 | 3.4 | 0.0 | 8.3 | 2.9 | 10.5 | 40.8 | 0.0 | 5.4 |
| Anbar | 9.8 | 7.3 | 0.0 | 9.6 | 5.4 | 8.1 | 0.0 | 2.8 | 4.8 |
| Baghdad | 24.8 | 32.5 | 44.2 | 16.2 | 11.8 | 10.8 | 17.3 | 2.4 | 24.3 |
| Babel | 4.1 | 3.3 | 6.5 | 0.6 | 4.9 | 0.3 | 0.0 | 0.0 | 0.3 |
| Karbala | 3.0 | 0.8 | 0.0 | 0.3 | 0.3 | 0.0 | 0.0 | 0.4 | 0.0 |
| Waset | 1.3 | 0.1 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 1.7 | 0.7 | 0.0 | 0.1 | 0.9 | 0.1 | 0.0 | 0.0 | 0.2 |
| Najaf | 0.4 | 0.0 | 0.0 | 1.8 | 0.4 | 2.3 | 0.0 | 1.2 | 0.1 |
| Al Qadeseya | 1.0 | 1.1 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.7 |
| Al Muthana | 6.0 | 1.3 | 0.0 | 0.3 | 5.4 | 0.5 | 0.0 | 0.0 | 4.4 |
| Thee Qar | 9.2 | 11.7 | 16.9 | 1.2 | 0.0 | 2.0 | 2.0 | 0.0 | 0.0 |
| Misan | 4.2 | 1.5 | 0.0 | 7.1 | 37.5 | 8.0 | 0.0 | 0.0 | 0.2 |
| Basra | 0.5 | 0.1 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.8 | 0.6 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 14.5 | 14.2 | 22.1 | 14.8 | 14.4 | 26.2 | 33.7 | 88.7 | 12.3 |
| Erbil | 10.1 | 19.4 | 10.4 | 13.5 | 9.7 | 15.2 | 0.0 | 0.0 | 42.0 |
| Dhook | 1.3 | 0.3 | 0.0 | 21.2 | 0.7 | 10.3 | 6.1 | 3.6 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table No. (40): Number of personal protective equipments and clothes available for workers at other health facilities (except hospitals) by Governorate: 01/01/2008 – 30/06/2008

| Governorate | Overall | Ordinary apron | Radiation protection apron | Gloves | Boots | Masks | Protective goggles | Helmet | Head cover/hat |
|--------------|-------------|----------------|----------------------------|--------------|------------|--------------|--------------------|-----------|----------------|
| Ninawa | 14 | 6 | 0 | 368 | 17 | 0 | 0 | 0 | 6 |
| Karkook | 33 | 11 | 0 | 2330 | 36 | 603 | 0 | 0 | 5 |
| Diala | 22 | 7 | 0 | 2400 | 17 | 1800 | 0 | 0 | 0 |
| Anbar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Baghdad | 317 | 354 | 19 | 4882 | 53 | 2515 | 5 | 20 | 81 |
| Babel | 63 | 81 | 0 | 1254 | 39 | 423 | 0 | 2 | 6 |
| Karbala | 51 | 25 | 0 | 141 | 39 | 240 | 14 | 0 | 2 |
| Waset | 20 | 28 | 0 | 4 | 8 | 8 | 0 | 0 | 0 |
| Saladin | 42 | 16 | 0 | 41 | 22 | 46 | 0 | 0 | 13 |
| Najaf | 2 | 2 | 0 | 6 | 0 | 182 | 0 | 0 | 0 |
| Al Qadeseya | 23 | 44 | 2 | 37 | 0 | 38 | 0 | 0 | 9 |
| Al Muthana | 41 | 35 | 0 | 1795 | 2 | 70 | 0 | 0 | 6 |
| Thee Qar | 20 | 97 | 62 | 1822 | 0 | 786 | 0 | 0 | 0 |
| Misan | 21 | 47 | 0 | 3412 | 0 | 0 | 0 | 0 | 0 |
| Basra | 12 | 15 | 0 | 27 | 0 | 16 | 0 | 0 | 8 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 111 | 116 | 4 | 8460 | 85 | 1993 | 0 | 8 | 2537 |
| Erbil | 154 | 232 | 0 | 210 | 5 | 50 | 0 | 0 | 0 |
| Dhook | 66 | 5 | 1 | 14379 | 0 | 3650 | 0 | 3 | 34 |
| Total | 1012 | 1121 | 88 | 41568 | 323 | 12420 | 19 | 33 | 2707 |

Table No. (41): Percentage of personal protective equipments and clothes available for workers at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Overall | Ordinary apron | Radiation protection apron | Gloves | Boots | Masks | Protective goggles | Helmet | Head cover/hat |
|--------------|--------------|----------------|----------------------------|--------------|--------------|--------------|--------------------|--------------|----------------|
| Ninawa | 1.4 | 0.5 | 0.0 | 0.9 | 5.3 | 0.0 | 0.0 | 0.0 | 0.2 |
| Karkook | 3.3 | 1.0 | 0.0 | 5.6 | 11.1 | 4.9 | 0.0 | 0.0 | 0.2 |
| Diala | 2.2 | 0.6 | 0.0 | 5.8 | 5.3 | 14.5 | 0.0 | 0.0 | 0.0 |
| Anbar | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 31.3 | 31.6 | 21.6 | 11.7 | 16.4 | 20.2 | 26.3 | 60.6 | 3.0 |
| Babel | 6.2 | 7.2 | 0.0 | 3.0 | 12.1 | 3.4 | 0.0 | 6.1 | 0.2 |
| Karbala | 5.0 | 2.2 | 0.0 | 0.3 | 12.1 | 1.9 | 73.7 | 0.0 | 0.1 |
| Waset | 2.0 | 2.5 | 0.0 | 0.0 | 2.5 | 0.1 | 0.0 | 0.0 | 0.0 |
| Saladin | 4.2 | 1.4 | 0.0 | 0.1 | 6.8 | 0.4 | 0.0 | 0.0 | 0.5 |
| Najaf | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 2.3 | 3.9 | 2.3 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.3 |
| Al Muthana | 4.1 | 3.1 | 0.0 | 4.3 | 0.6 | 0.6 | 0.0 | 0.0 | 0.2 |
| Thee Qar | 2.0 | 8.7 | 70.5 | 4.4 | 0.0 | 6.3 | 0.0 | 0.0 | 0.0 |
| Misan | 2.1 | 4.2 | 0.0 | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 1.2 | 1.3 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 11.0 | 10.3 | 4.5 | 20.4 | 26.3 | 16.0 | 0.0 | 24.2 | 93.7 |
| Erbil | 15.2 | 20.7 | 0.0 | 0.5 | 1.5 | 0.4 | 0.0 | 0.0 | 0.0 |
| Dhook | 6.5 | 0.4 | 1.1 | 34.6 | 0.0 | 29.4 | 0.0 | 9.1 | 1.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table No. (42): Number of incinerators, their operational condition, amounts and daily average of incinerated waste, percentage of types of incinerator failure, procedures applied in case of failure and kind of fuel used at State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | No. of incinerators | | Amount of incinerate waste Kg.*6 months | Average of the amount of incinerated waste Kg./day | % of types of failure | | % of type of procedures | | % of kind of used fuel | | | |
|-------------|---------|---------------------|--------------|---|--|-----------------------|----------|-------------------------|-------------|------------------------|------------------|---------------|-------------|
| | | Functioning | In disrepair | | | Partial | Complete | Maintenance | Replacement | Gas | Diesel/ kerosene | White naphtha | Unavailable |
| Ninawa | State | 11 | 3 | 199879.7 | 99.8 | 33.3 | 66.7 | 33.3 | 66.7 | 7.0 | 78.6 | 14.3 | 0.0 |
| | private | 1 | 0 | 3185.0 | 17.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | State | 6 | 0 | 48812.4 | 44.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | State | 2 | 5 | 4186.0 | 11.5 | 40.0 | 60.0 | 40.0 | 60.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| | private | 0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Anbar | State | 7 | 5 | 222045.5 | 174.3 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 83.3 | 8.3 | 8.3 |
| | private | 1 | 0 | 1274.0 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Baghdad | State | 30 | 2 | 644007.0 | 118.0 | 0.0 | 50.0 | 50.0 | 50.0 | 3.0 | 93.8 | 3.1 | 0.0 |
| | private | 1 | 1 | 7971.6 | 43.8 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 50.0 | 0.0 | 50.0 |
| Babel | State | 8 | 0 | 143168.5 | 98.3 | 50.0 | 0.0 | 0.0 | 0.0 | 13.0 | 87.5 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | State | 5 | 0 | 42861.0 | 47.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | State | 5 | 4 | 59677.8 | 65.6 | 0.0 | 100.0 | 0.0 | 100.0 | 11.0 | 88.9 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 8 | 1 | 124822.9 | 85.7 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 77.8 | 11.1 | 11.1 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 4 | 1 | 86559.2 | 118.9 | 100.0 | 100.0 | 0.0 | 100.0 | 0.0 | 80.0 | 20.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | State | 5 | 0 | 324888.2 | 357.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0 | 80.0 | 0.0 | 0.0 |
| | private | 1 | 0 | 3276.0 | 18.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Al Muthana | State | 2 | 2 | 12812.8 | 35.2 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Governorate | Type | No. of incinerators | | Amount of incinerate waste Kg.*6 months | Average of the amount of incinerated waste Kg./day | % of types of failure | | % of type of procedures | | % of kind of used fuel | | | |
|---------------------|---------|---------------------|--------------|---|--|-----------------------|----------|-------------------------|-------------|------------------------|------------------|---------------|-------------|
| | | Functioning | In disrepair | | | Partial | Complete | Maintenance | Replacement | Gas | Diesel/ kerosene | White naphtha | Unavailable |
| Thee Qar | State | 3 | 1 | 125798.4 | 230.4 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 75.0 | 25.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | State | 6 | 0 | 196046.8 | 179.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 83.3 | 16.7 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 11 | 1 | 186866.7 | 93.3 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | |
| Sulimaneya | State | 3 | 1 | 175555.4 | 321.5 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 50.0 | 50.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | State | 6 | 7 | 71427.7 | 65.4 | 71.4 | 28.6 | 100.0 | 0.0 | 0.0 | 87.7 | 6.7 | 6.7 |
| | private | 1 | 0 | 12740.0 | 70.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Dhook | State | 6 | 1 | 102986.5 | 94.3 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | State | 128 | 34 | 2772402.4 | 124.5 | 41.2 | 58.8 | 44.1 | 55.9 | 3.3 | 88.6 | 6.6 | 1.5 |
| | private | 5 | 2 | 28446.6 | 31.3 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 30.0 | 40.0 | 30.0 |

Table No. (43): Number of incinerators, their operational condition, amounts and daily average of incinerated waste, percentage of kinds of incinerator failure, procedures applied in case of failure and kind of fuel used at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | No. of incinerators | | Amount of incinerate waste Kg.*6 months | Average of the amount of incinerated waste Kg./day | % of types of failure | | % of type of procedures | | % of kind of used fuel | | | | | |
|---------------------|---------------------|--------------|---|--|-----------------------|-------------|-------------------------|-------------|------------------------|------------|------------------|---------------|-------------|-------------|
| | Functioning | In disrepair | | | Partial | Complete | Maintenance | Replacement | gasoline | Gas | Diesel/ kerosene | White naphtha | Electricity | Unavailable |
| Ninawa | 5 | 1 | 11872.5 | 15.83 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 83.3 | 0.0 | 0.0 | 16.7 |
| Karkook | 27 | 1 | 24259.5 | 5.99 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 21.4 | 39.3 | 0.0 | 39.3 |
| Diala | 2 | 6 | 2418.0 | 8.06 | 33.3 | 66.7 | 50.0 | 50.0 | 0.0 | 0.0 | 87.5 | 12.5 | 0.0 | 0.0 |
| Anbar | 14 | 1 | 60165.0 | 28.65 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 33.3 | 53.3 | 0.0 | 13.3 |
| Baghdad | 79 | 3 | 97881.0 | 8.26 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 40.2 | 42.7 | 0.0 | 14.6 |
| Babel | 5 | 0 | 8250.0 | 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0 | 40.0 | 40.0 | 0.0 | 0.0 |
| Karbala | 15 | 1 | 16605.0 | 7.38 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 62.5 | 25.0 | 0.0 | 12.5 |
| Waset | 11 | 4 | 18925.5 | 11.47 | 0.0 | 100.0 | 25.0 | 75.0 | 0.0 | 0.0 | 6.7 | 33.3 | 0.0 | 0.0 |
| Saladin | 2 | 0 | 12000.0 | 40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 0 | 2 | 0.0 | 14 | 50.0 | 50.0 | 50.0 | 50.0 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 |
| Al Qadeseya | 9 | 0 | 19764.0 | 14.64 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55.6 | 44.4 | 0.0 | 0.0 |
| Al Muthana | 4 | 10 | 4050.0 | 6.75 | 40.0 | 60.0 | 40.0 | 60.0 | 0.0 | 0.0 | 71.4 | 28.6 | 0.0 | 0.0 |
| Thee Qar | 7 | 0 | 16285.5 | 15.51 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.6 | 0.0 | 71.4 |
| Misan | 24 | 1 | 69084.0 | 19.19 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 32.0 | 60.0 | 4.0 | 4.9 |
| Basra | 44 | 0 | 146124.0 | 22.14 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5 | 0.0 | 95.5 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | | | | |
| Sulimaneya | 1 | 2 | 4387.5 | 29.25 | 100.0 | 0.0 | 100.0 | 0.0 | 25.0 | 0.0 | 50.0 | 25.0 | 0.0 | 0.0 |
| Erbil | 1 | 4 | 6450.0 | 43 | 125.0 | 0.0 | 125.0 | 0.0 | 0.0 | 0.0 | 57.1 | 14.3 | 28.6 | 0.0 |
| Dhook | 11 | 3 | 27456.0 | 16.64 | 33.3 | 66.7 | 33.3 | 66.7 | 7.1 | 0.0 | 21.4 | 71.4 | 0.0 | 0.0 |
| Total | 261 | 39 | 545977.5 | 17.7 | 18.1 | 60.0 | 31.1 | 47.0 | 1.2 | 0.3 | 48.1 | 34.5 | 0.8 | 14.3 |

Table No. (44): Number of incinerators conforming to environmental standards, percentage of their efficiency and method of waste disposal in case of incinerator failure at State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | Total No. of incinerators | No. of incinerators conforming to environmental specifications | % of incinerator efficiency | | | % disposal method of waste during incinerator disrepair | | | | |
|-------------|---------|---------------------------|--|-----------------------------|----------|------|---|------|-----|-------|-------|
| | | | | New | Moderate | poor | 1 | 2 | 3 | 4 | 5 |
| Ninawa | State | 14 | 9 | 66.7 | 33.3 | 0.0 | 25.0 | 0.0 | 0.0 | 25.0 | 50.0 |
| | private | 1 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | State | 6 | 6 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | State | 7 | 1 | 25.0 | 25.0 | 50.0 | 80.0 | 0.0 | 0.0 | 20.0 | 0.0 |
| | private | 1 | 0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 12 | 4 | 28.6 | 28.6 | 42.9 | 40.0 | 20.0 | 0.0 | 20.0 | 20.0 |
| | private | 1 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | State | 32 | 28 | 65.6 | 31.3 | 3.1 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |
| | private | 2 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Babel | State | 8 | 6 | 37.5 | 62.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | State | 5 | 1 | 80.0 | 0.0 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | State | 9 | 0 | 40.0 | 40.0 | 20.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 9 | 7 | 37.5 | 37.5 | 25.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 5 | 5 | 80.0 | 0.0 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | State | 5 | 2 | 60.0 | 40.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | private | 1 | 0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | State | 4 | 1 | 0.0 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Governorate | Type | Total No. of incinerators | No. of incinerators conforming to environmental specifications | % of incinerator efficiency | | | % disposal method of waste during incinerator disrepair | | | | | |
|---------------------|---------|---------------------------|--|-----------------------------|----------|------|---|------|-----|-------|-------|--|
| | | | | New | Moderate | poor | 1 | 2 | 3 | 4 | 5 | |
| Thee Qar | State | 4 | 2 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Misan | State | 6 | 2 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Basra | State | 12 | 6 | 27.3 | 72.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Kurdistan R. | | | | | | | | | | | | |
| Sulimaneya | State | 4 | 3 | 50.0 | 25.0 | 25.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Erbil | State | 13 | 7 | 42.9 | 21.4 | 35.7 | 16.7 | 0.0 | 0.0 | 50.0 | 8.3 | |
| | private | 1 | 0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Dhook | State | 7 | 4 | 42.9 | 57.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | |
| | private | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total | State | 162 | 94 | 49.5 | 40.2 | 10.3 | 38.0 | 12.5 | 0.0 | 25.7 | 28.3 | |
| | private | 7 | 3 | 60.0 | 40.0 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | |

1- Haphazard incineration in health facility 2- haphazard incineration outside health facility 3- discarding waste unburned in nearby land

4- Handing waste to municipal entity to dump 5- others

Table No. (45): Number of incinerators conforming to environmental standards, percentage of their efficiency and method of waste disposal in case of incinerator failure, at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Total No. of incinerators | No. of incinerators conforming to environmental specifications | % of incinerator efficiency | | | % disposal method of waste during incinerator disrepair | | | | |
|--------------|---------------------------|--|-----------------------------|-------------|-------------|---|------------|------------|-------------|-------------|
| | | | New | Moderate | poor | 1 | 2 | 3 | 4 | 5 |
| Ninawa | 6 | 5 | 66.7 | 16.7 | 16.7 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Karkook | 28 | 1 | 3.7 | 96.3 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Diala | 8 | 0 | 33.3 | | 66.7 | 75.0 | 12.5 | 12.5 | 0.0 | 0.0 |
| Anbar | 15 | 2 | 14.3 | 7.1 | 78.6 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 82 | 38 | 43.0 | 35.4 | 21.5 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 |
| Babel | 5 | 1 | 20.0 | 40.0 | 40.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 16 | 3 | 46.7 | 33.3 | 20.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | 15 | 0 | 9.1 | 54.5 | 36.4 | 60.0 | 20.0 | 0.0 | 20.0 | 0.0 |
| Saladin | 2 | 1 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 2 | 0 | 0.0 | 0.0 | 100.0 | 50.0 | 0.0 | 0.0 | 0.0 | 50.0 |
| Al Qadeseya | 9 | 0 | 11.1 | 77.8 | 11.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 14 | 0 | 12.5 | 62.5 | 25.0 | 9.1 | 9.1 | 0.0 | 9.1 | 72.7 |
| Thee Qar | 7 | 0 | 0.0 | 71.4 | 28.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 25 | 0 | 0.0 | 84.0 | 16.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 44 | 21 | 13.6 | 86.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 3 | 1 | 0.0 | 50.0 | 50.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |
| Erbil | 5 | 5 | 0.0 | 57.1 | 42.9 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |
| Dhook | 14 | 1 | 8.3 | 58.3 | 33.3 | 25.0 | 25.0 | 0.0 | 50.0 | 0.0 |
| Total | 300 | 79 | 22.7 | 57.5 | 19.8 | 45.0 | 8.2 | 1.9 | 23.6 | 21.2 |

1- Haphazard incineration in health facility 2- haphazard incineration outside health facility 3- discarding waste unburned in nearby land

4- Handing waste to municipal entity to dump 5- others

Table No. (46): Average number of incinerator operations per week, time length of operation, average stack height, percentages of incinerator efficiency and availability of built in pollution control equipment and devices for measurement of pollution at State and private hospital by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | Average frequency of operating incinerator | Average of period of operations per day (hour) | Average of stack height (meter) | % of incinerator efficiency | | | % availability of emitted pollutants control equipment | % availability of measurement equipment of emitted pollutants |
|-------------|---------|--|--|---------------------------------|-----------------------------|----------|------|--|---|
| | | | | | New | Moderate | Poor | | |
| Ninawa | State | 5.0 | 2.1 | 6.2 | 58.3 | 33.3 | 8.3 | 16.7 | 0.0 |
| | Private | 2.0 | 2.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | State | 5.0 | 1.2 | 5.0 | 50.0 | 16.7 | 33.3 | 66.7 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | State | 6.0 | 7.0 | 5.0 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 2.0 | 2.0 | 4.8 | 50.0 | 33.3 | 16.7 | 0.0 | 0.0 |
| | Private | 4.0 | 2.0 | 3.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | State | 6.0 | 3.9 | 6.5 | 67.7 | 22.6 | 9.7 | 28.5 | 6.5 |
| | Private | 4.0 | 3.0 | 7.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Babel | State | 4.0 | 3.8 | 6.9 | 50.0 | 50.0 | 0.0 | 12.5 | 12.5 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | State | 7.0 | 3.8 | 4.8 | 80.0 | 20.0 | 0.0 | 20.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | State | 6.0 | 3.6 | 10.2 | 40.0 | 40.0 | 20.0 | 60.0 | 20.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 4.0 | 1.9 | 6.9 | 62.5 | 25.0 | 12.5 | 37.5 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 6.0 | 2.3 | 8.0 | 60.0 | 20.0 | 20.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | State | 4.0 | 1.8 | 12.2 | 20.0 | 80.0 | 0.0 | 0.0 | 0.0 |
| | Private | 7.0 | 1.3 | 6.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Governorate | Type | Average frequency of operating incinerator | Average of period of operations per day (hour) | Average of stack height (meter) | % of incinerator efficiency | | | % availability of emitted pollutants control equipment | % availability of measurement equipment of emitted pollutants |
|---------------------|---------|--|--|---------------------------------|-----------------------------|----------|------|--|---|
| | | | | | New | Moderate | Poor | | |
| Al Muthana | State | 13.0 | 3.5 | 6.5 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | State | 5.0 | 2.7 | 7.3 | 33.3 | 66.7 | 0.0 | 33.3 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | State | 5.0 | 4.0 | 6.3 | 16.7 | 50.0 | 33.3 | 16.7 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 4.0 | 2.8 | 4.7 | 45.5 | 54.6 | 0.0 | 9.1 | 9.1 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | State | 7.0 | 3.5 | 3.3 | 75.0 | 0.0 | 25.0 | 50.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | State | 5.0 | 2.1 | 5.2 | 41.7 | 25.0 | 33.3 | 8.3 | 0.0 |
| | Private | 1.0 | 2.0 | 5.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Dhook | State | 4.0 | 3.6 | 9.7 | 42.9 | 42.9 | 14.3 | 42.9 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | State | 5.4 | 3.1 | 6.6 | 51.5 | 34.9 | 13.6 | 21.5 | 3.7 |
| | Private | 3.6 | 2.1 | 4.8 | 40.0 | 60.0 | 0.0 | 0.0 | 0.0 |

N.B. frequency of operations per day is more than one, and this is noted average of operations in State hospitals in Mothanna Governorate (13.0)

Table No. (47): Average number of incinerator operations per week, time length of operation, average stack height, percentages of incinerator efficiency and availability of built in pollution control equipment and devices for measurement of pollution at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Average frequency of operating incinerator | Average of period of operations per day (hour) | Average of stack height (meter) | % of incinerator efficiency | | | % availability of emitted pollutants control equipment | % availability of measurement equipment of emitted pollutants |
|--------------|--|--|---------------------------------|-----------------------------|----------|-------|--|---|
| | | | | New | Moderate | Poor | | |
| Ninawa | 2.0 | 2.1 | 3.2 | 66.7 | 33.3 | 0.0 | 33.3 | 0.0 |
| Karkook | 5.0 | 1.1 | 2.1 | 14.8 | 0.0 | 85.2 | 0.0 | 0.0 |
| Diala | 4.0 | 1.7 | 3.3 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Anbar | 2.0 | 1.4 | 2.4 | 16.7 | 8.3 | 75.0 | 0.0 | 0.0 |
| Baghdad | 4.0 | 1.7 | 3.8 | 50.7 | 28.0 | 21.3 | 3.8 | 0.0 |
| Babel | 3.0 | 1.3 | 4.0 | 40.0 | 20.0 | 40.0 | 0.0 | 0.0 |
| Karbala | 4.0 | 1.4 | 2.7 | 46.7 | 26.7 | 26.7 | 20.0 | 6.7 |
| Waset | 4.0 | 3.0 | 2.1 | 14.3 | 71.4 | 14.3 | 0.0 | 0.0 |
| Saladin | 2.0 | 3.0 | 5.0 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 5.0 | 3.0 | 4.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Al Qadeseya | 4.0 | 1.2 | 2.9 | 12.5 | 87.5 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 4.0 | 1.1 | 2.3 | 0.0 | 25.0 | 75.0 | 0.0 | 0.0 |
| Thee Qar | 4.0 | 1.4 | 2.8 | 0.0 | 60.0 | 40.0 | 0.0 | 0.0 |
| Misan | 4.0 | 3.4 | 2.7 | 4.4 | 87.0 | 8.7 | 4.0 | 0.0 |
| Basra | 4.0 | 1.6 | 2.7 | 13.6 | 86.4 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | |
| Sulimaneya | 3.0 | 2.5 | 3.3 | 0.0 | 50.0 | 50.0 | 25.0 | 0.0 |
| Erbil | 2.0 | 1.3 | 3.7 | 14.3 | 57.1 | 28.6 | 42.9 | 14.3 |
| Dhook | 3.0 | 4.7 | 3.7 | 9.1 | 45.5 | 45.5 | 8.3 | 0.0 |
| Total | 3.5 | 2.0 | 3.2 | 25.0 | 43.1 | 31.9 | 24.8 | 3.6 |

Table No. (48): Percentage of available scale for weighing waste before incineration, average weight of waste before incineration and available records of the amounts of wastes incinerated at State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | % Availability of scale | % Institutes weighing waste before incineration | Average weight of waste before incineration (Kg.) | % available of record of the amounts of incinerated waste | % of sustainable record of the amounts of incinerated waste |
|-------------|---------|-------------------------|---|---|---|---|
| Ninawa | State | 7.1 | 7.1 | 1.8 | 7.1 | 7.1 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | State | 33.3 | 33.3 | 10.3 | 33.3 | 33.3 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | State | 28.1 | 28.1 | 16.3 | 25.0 | 25.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Babel | State | 12.5 | 12.5 | 39.4 | 12.5 | 12.5 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | State | 80.0 | 80.0 | 41.0 | 60.0 | 60.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 11.1 | 11.1 | 22.2 | 11.1 | 11.1 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 60.0 | 40.0 | 40.0 | 40.0 | 20.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Governorate | Type | % Availability of scale | % Institutes weighing waste before incineration | Average weight of waste before incineration (Kg.) | % available of record of the amounts of incinerated waste | % of sustainable record of the amounts of incinerated waste |
|---------------------|-------------|--------------------------------|--|--|--|--|
| Al Muthana | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 8.3 | 8.3 | 9.3 | 8.3 | 8.3 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | |
| Sulimaneya | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | State | 12.5 | 11.8 | 20.0 | 10.7 | 10.1 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Table No. (49): Percentage of available scale for weighing waste before incineration, average weight of waste before incineration and available records of the amounts of wastes incinerated at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | No. of health facilities | No. of health facilities having incinerators | % Availability of scale | % Institutes weighing waste before incineration | Average weight of waste before incineration (Kg.) | % available of record of the amounts of incinerated waste | % of sustainable record of the amounts of incinerated waste |
|--------------|--------------------------|--|-------------------------|---|---|---|---|
| Ninawa | 50 | 6 | 6.7 | 6.7 | 1.7 | 6.7 | 6.7 |
| Karkook | 35 | 28 | 33.3 | 33.3 | 10.3 | 33.3 | 33.3 |
| Diala | 16 | 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 24 | 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 142 | 82 | 26.5 | 26.5 | 15.3 | 23.5 | 23.5 |
| Babel | 35 | 5 | 12.5 | 12.5 | 39.4 | 12.5 | 12.5 |
| Karbala | 23 | 16 | 80.0 | 80.0 | 41.0 | 60.0 | 60.0 |
| Waset | 22 | 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | 19 | 2 | 11.1 | 11.1 | 22.2 | 11.1 | 11.1 |
| Najaf | 22 | 2 | 60.0 | 40.0 | 40.0 | 40.0 | 20.0 |
| Al Qadeseya | 29 | 9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Muthana | 21 | 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | 31 | 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 27 | 25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 47 | 44 | 8.3 | 8.3 | 9.3 | 8.3 | 8.3 |
| Kurdistan R. | | | | | | | |
| Sulimaneya | 58 | 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 33 | 7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | 35 | 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 669 | 305 | 7.5 | 7.5 | 20.4 | 6.6 | 6.5 |

Table No. (50): Average weight of ash generated per week (incineration products), percentage of ash disposal method, percentage of State and private hospitals using incinerators of other health facilities, average amount of waste received daily at State and private hospitals by Governorate : 1/1/2008 – 30/6/2008

| Governorate | Type | Average weight of ash per week (incineration product) (Kg) for facilities that weigh ash | % of disposal method of ash | | | | | | % of State and private hospitals using incinerators of other Health facilities | Average amount of waste receiver per day (Kg.) | |
|-------------|---------|--|-----------------------------|-------|------|------|------|------|--|--|------|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | | | |
| Ninawa | State | 0.3 | 0.0 | 83.3 | 0.0 | 0.0 | 0.0 | 0.0 | 16.7 | 16.7 | 21.5 |
| | Private | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | State | 9.7 | 0.0 | 83.30 | 0.0 | 0.0 | 16.7 | 0.0 | 33.3 | 33.3 | 4.5 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Diala | State | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 25.0 | 10.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 0.0 | 0.0 | 85.7 | 14.3 | 0.0 | 15.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | State | 17.3 | 0.0 | 78.1 | 3.1 | 0.0 | 12.5 | 3.1 | 50.0 | 50.0 | 35.1 |
| | Private | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 15.0 |
| Babel | State | 4.0 | 0.0 | 87.5 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 12.5 | 20.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | State | 5.2 | 20.0 | 80.0 | 0.0 | 0.0 | 20.0 | 0.0 | 60.0 | 60.0 | 50.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waset | State | 0.0 | 0.0 | 80.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 60.0 | 7.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Saladin | State | 2.5 | 0.0 | 50.0 | 12.5 | 12.5 | 12.5 | 12.5 | 75.0 | 75.0 | 9.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | State | 11.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60.0 | 60.0 | 73.3 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | State | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0 | 20.0 | 15.0 |
| | Private | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Governorate | Type | Average weight of ash per week (incineration product) (Kg) for facilities that weigh ash | % of disposal method of ash | | | | | | % of State and private hospitals using incinerators of other Health facilities | Average amount of waste receiver per day (Kg.) | |
|---------------------|---------|--|-----------------------------|-------|-----|-------|------|------|--|--|-------|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | | | |
| Al Muthana | State | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 7.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thee Qar | State | 0.0 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 33.3 | 420.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | State | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 16.7 | 50.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 13.6 | 0.0 | 90.9 | 0.0 | 9.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | | | |
| Sulimaneya | State | 0.0 | 0.0 | 25.0 | 0.0 | 0.0 | 50.0 | 25.0 | 0.0 | 50.0 | 4.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Erbil | State | 0.0 | 0.0 | 64.3 | 0.0 | 21.4 | 0.0 | 0.0 | 0.0 | 23.1 | 20.5 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dhook | State | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 71.4 | 12.2 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | State | 7.5 | 0.8 | 82.1 | 2.3 | 3.3 | 8.0 | 3.5 | 0.0 | 36.0 | 44.6 |
| | Private | 0.0 | 0.0 | 80.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 43.8 | 15.0 |

1- Storage in health facility till disposed

2- handing waste to municipal entity for landfilling

3- recycling (after treatment)

4- handing to contractor

5- handing to a specialized or official entity

6- others

Table No. (51): Average weight of ash generated per week (incineration products), percentage of ash disposal method, percentage of health facilities using incinerators of other health facilities, average amount of waste received daily at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | No. of facilities without incinerator | Average weight of ash per week (incineration product) (Kg) for facilities that weigh ash | % of disposal method of ash | | | | | % of State and private hospitals using incinerators of other Health facilities | Average amount of waste receiver per day (Kg.) |
|--------------|---------------------------------------|--|-----------------------------|-------------|------------|------------|------------|--|--|
| | | | 1 | 2 | 3 | 4 | 5 | | |
| Ninawa | 44 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karkook | 7 | 0.4 | 0.0 | 33.3 | 0.0 | 3.7 | 63.0 | 3.7 | 50 |
| Diala | 8 | 0.0 | 0.0 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 0.0 |
| Anbar | 9 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | 60 | 0.4 | 0.0 | 83.6 | 2.5 | 2.5 | 11.4 | 1.3 | 3.0 |
| Babel | 30 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karbala | 7 | 1.3 | 0.0 | 93.3 | 0.0 | 0.0 | 6.7 | 6.7 | 2.0 |
| Waset | 7 | 0.0 | 0.0 | 58.3 | 50.0 | 0.0 | 41.7 | 0.0 | 0.0 |
| Saladin | 17 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Najaf | 20 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Al Qadeseya | 20 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 37.5 | 7.3 |
| Al Muthana | 7 | 0.0 | 0.0 | 87.5 | 0.0 | 0.0 | 12.5 | 25.0 | 0.6 |
| Thee Qar | 24 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Misan | 2 | 0.0 | 4.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | 3 | 0.0 | 0.0 | 81.8 | 0.0 | 18.2 | 0.0 | 0.0 | 0.0 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 52 | 0.0 | 0.0 | 25.0 | 0.0 | 75.0 | 0.0 | 0.0 | 0.0 |
| Erbil | 26 | 0.0 | 0.0 | 85.7 | 0.0 | 14.3 | 0.0 | 0.0 | 0.0 |
| Dhook | 21 | 0.0 | 0.0 | 91.7 | 0.0 | 0.0 | 8.3 | 0.0 | 0.0 |
| Total | 364 | 0.7 | 0.3 | 80.2 | 1.0 | 5.4 | 0.0 | 3.1 | 3.6 |

1- Storage in health facility until handing to specialized entity 2- handing waste to municipal entity for landfilling 3- handing to contractor
4- handing to a specialized or official entity 5- others

Table No. (52): Percentage of trained workers, number of training courses, percentage of wearing protective clothes and equipment, number of cadres working in incineration by educational qualification at State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | % of trained workers | No. of training courses for working cadres in incineration | % of usage of personal protective equipment | No. of working cadres in incineration at State and private hospitals | | | | | |
|-------------|---------|----------------------|--|---|--|------------|--------|-------------|--------|-------|
| | | | | | Illiterate | Elementary | Middle | Preparatory | Others | Total |
| Ninawa | State | 41.7 | 8 | 33.3 | 10 | 12 | 3 | 4 | 3 | 32 |
| | Private | 0.0 | 0 | 0.0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Karkook | State | 66.7 | 7 | 66.7 | 1 | 5 | 1 | 1 | 3 | 11 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diala | State | 0.0 | 0 | 75.0 | 6 | 0 | 0 | 0 | 1 | 7 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anbar | State | 14.3 | 1 | 0.0 | 0 | 22 | 9 | 4 | 7 | 42 |
| | Private | 0.0 | 0 | 0.0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Baghdad | State | 58.1 | 33 | 87.1 | 34 | 28 | 11 | 6 | 6 | 85 |
| | Private | 100.0 | 1 | 100.0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Babel | State | 50.0 | 7 | 100.0 | 3 | 4 | 3 | 4 | 4 | 18 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karbala | State | 80.0 | 12 | 100.0 | 1 | 10 | 2 | 0 | 1 | 14 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waset | State | 20.0 | 2 | 20.0 | 1 | 2 | 0 | 3 | 0 | 6 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Saladin | State | 50.0 | 10 | 50.0 | 5 | 7 | 2 | 0 | 0 | 14 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Najaf | State | 60.0 | 7 | 100.0 | 4 | 7 | 2 | 1 | 0 | 14 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Qadeseya | State | 0.0 | 0 | 60.0 | 5 | 6 | 0 | 2 | 1 | 14 |
| | Private | 100.0 | 4 | 100.0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Al Muthana | State | 50.0 | 2 | 75.0 | 3 | 5 | 0 | 0 | 0 | 8 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Governorate | Type | % of trained workers | No. of training courses for working cadres in incineration | % of usage of personal protective equipment | No. of working cadres in incineration at State and private hospitals | | | | | |
|---------------------|---------|----------------------|--|---|--|------------|--------|-------------|--------|-------|
| | | | | | Illiterate | Elementary | Middle | Preparatory | Others | Total |
| Thee Qar | State | 33.3 | 2 | 33.3 | 4 | 1 | 3 | 2 | 2 | 12 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misan | State | 0.0 | 0 | 0.0 | 4 | 8 | 1 | 1 | 0 | 14 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Basra | State | 18.2 | 4 | 50.0 | 12 | 20 | 2 | 1 | 1 | 36 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimanya | State | 50.0 | 2 | 50.0 | 22 | 6 | 0 | 1 | 0 | 29 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Erbil | State | 16.7 | 2 | 41.7 | 29 | 38 | 3 | 2 | 1 | 73 |
| | Private | 0.0 | 0 | 100.0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Dhook | State | 28.6 | 3 | 28.6 | 3 | 2 | 2 | 0 | 2 | 9 |
| | Private | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | State | 37.7 | 102 | 55.3 | 147 | 183 | 44 | 32 | 32 | 438 |
| | Private | 48.7 | 5 | 56.6 | 2 | 6 | 0 | 0 | 0 | 8 |

Table No. (53): Percentage of trained workers, number of training courses, percentage of wearing protective clothes and equipment, number of cadres working in incineration by educational qualification at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | % of trained workers | % of usage of personal protective equipment | No. of training courses for working cadres in incineration | No. of working cadres in incineration at State and private hospitals | | | | | |
|--------------|----------------------|---|--|--|------------|-----------|-------------|-----------|------------|
| | | | | Illiterate | Elementary | Middle | Preparatory | Others | Total |
| Ninawa | 33.3 | 50.0 | 2 | 5 | 6 | 0 | 0 | 0 | 11 |
| Karkook | 44.4 | 29.6 | 15 | 15 | 27 | 6 | 3 | 4 | 55 |
| Diala | 0.0 | 33.3 | 0 | 7 | 1 | 0 | 0 | 0 | 8 |
| Anbar | 0.0 | 0.0 | 0 | 4 | 19 | 3 | 4 | 2 | 32 |
| Baghdad | 34.2 | 23.1 | 40 | 69 | 67 | 13 | 9 | 16 | 174 |
| Babel | 0.0 | 20.0 | 0 | 4 | 1 | 1 | 1 | 0 | 7 |
| Karbala | 40.0 | 80.0 | 10 | 25 | 15 | 1 | 0 | 1 | 42 |
| Waset | 9.1 | 18.2 | 2 | 18 | 3 | 0 | 0 | 1 | 22 |
| Saladin | 0.0 | 0.0 | 0 | 4 | 1 | 0 | 0 | 1 | 6 |
| Najaf | 0.0 | 0.0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Al Qadeseya | 11.1 | 22.2 | 16 | 14 | 15 | 0 | 1 | 4 | 34 |
| Al Muthana | 25.0 | 50.0 | 2 | 9 | 0 | 1 | 0 | 0 | 10 |
| Thee Qar | 14.3 | 57.1 | 3 | 12 | 5 | 0 | 0 | 0 | 17 |
| Misan | 8.0 | 8.0 | 3 | 21 | 22 | 1 | 0 | 0 | 44 |
| Basra | 4.6 | 2.3 | 3 | 67 | 39 | 2 | 0 | 9 | 117 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | 0.0 | 0.0 | 0 | 7 | 0 | 0 | 1 | 0 | 8 |
| Erbil | 0.0 | 28.6 | 0 | 13 | 7 | 1 | 1 | 0 | 22 |
| Dhook | 16.7 | 16.7 | 2 | 10 | 9 | | 1 | 0 | 21 |
| Total | 20.4 | 22.9 | 98 | 305 | 237 | 30 | 21 | 38 | 631 |

Table No. (54): Percentage of hazardous medical waste disposal method in case of incinerator unavailability, weight of waste, available record of waste amounts and average weekly number of handing waste to a formal entity before disposal at State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Type | % of disposal method of medical waste in health facilities having no incinerator | | | | | % of waste weight before disposal | % of available record of waste amount before disposal | If handed to official entity: Average frequency of handing per week |
|-------------|---------|--|---|---------------------------|---------------------------|--------|-----------------------------------|---|---|
| | | Incinerated within health facility premises | Incinerated haphazardly outside health facility | Disposed onto nearby land | Handed to official entity | Others | | | |
| Ninawa | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| Karkook | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 100.0 | 2.5 |
| Diala | State | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| | Private | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 |
| Anbar | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Baghdad | State | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 28.6 | 50.0 | 3.4 |
| | Private | 2.9 | 0.0 | 0.0 | 97.1 | 0.0 | 39.4 | 100.0 | 2.0 |
| Babel | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1.3 |
| Karbala | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 50.0 | 100.0 | 2.0 |
| Waset | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| Saladin | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| Najaf | State | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 6.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 66.7 | 100.0 | 4.0 |

| Governorate | Type | % of disposal method of medical waste in health facilities having no incinerator | | | | | % of waste weight before disposal | % of available record of waste amount before disposal | If handed to official entity: Average frequency of handing per week |
|---------------------|---------|--|---|---------------------------|---------------------------|--------|-----------------------------------|---|---|
| | | Incinerated within health facility premises | Incinerated haphazardly outside health facility | Disposed onto nearby land | Handed to official entity | Others | | | |
| Al Qadeseya | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 7.0 |
| Al Muthana | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| Thee Qar | State | 0.0 | 0.0 | 0.0 | 75.0 | 25.0 | 0.0 | 0.0 | 5.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| Misan | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Basra | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 3.4 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | State | 0.0 | 13.6 | 0.0 | 86.4 | 0.0 | 0.0 | 0.0 | 3.3 |
| | Private | 0.0 | 12.5 | 0.0 | 87.5 | 0.0 | 0.0 | 0.0 | 3.1 |
| Erbil | State | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 2.0 |
| | Private | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 3.6 |
| Dhook | State | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Private | 0.0 | 0.0 | 0.0 | 25.0 | 75.0 | 0.0 | 0.0 | 6.0 |
| Total | State | 0.0 | 14.1 | 0.0 | 83.1 | 2.9 | 3.6 | 10.0 | 3.6 |
| | Private | 1.4 | 1.3 | 1.5 | 89.9 | 5.9 | 3.2 | 55.9 | 3.2 |

Table No. (55): Percentage of hazardous medical waste disposal method in case of incinerator unavailability, weight of waste, available record of waste amounts and average weekly number of handing waste to a formal entity before disposal at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | % of disposal method of medical waste in health facilities having no incinerator | | | | | % of waste weight before disposal | % of available record of waste amount before disposal | If handed to official entity: Average frequency of handing per week |
|--------------|--|---|---------------------------|---------------------------|--------|-----------------------------------|---|---|
| | Incinerated within health facility premises | Incinerated haphazardly outside health facility | Disposed onto nearby land | Handed to official entity | Others | | | |
| Ninawa | 28.2 | 32.4 | 0.0 | 39.4 | 0.0 | 0.0 | 0.0 | 3.0 |
| Karkook | 28.6 | 42.9 | 0.0 | 28.6 | 0.0 | 14.3 | 100.0 | 6.0 |
| Diala | 62.5 | 37.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anbar | 22.2 | 11.1 | 0.0 | 66.7 | 0.0 | 0.0 | 0.0 | 1.2 |
| Baghdad | 26.8 | 18.3 | 0.0 | 53.5 | 1.4 | 8.5 | 60.0 | 2.4 |
| Babel | 58.8 | 14.7 | 0.0 | 23.5 | 2.9 | 0.0 | 0.0 | 4.9 |
| Karbala | 0.0 | 0.0 | 0.0 | 71.4 | 28.6 | 28.6 | 100.0 | 3.4 |
| Waset | 12.5 | 25.0 | 0.0 | 37.5 | 25.0 | 0.0 | 0.0 | 3.3 |
| Saladin | 31.6 | 10.5 | 0.0 | 52.6 | 5.3 | 0.0 | 0.0 | 3.0 |
| Najaf | 47.6 | 4.8 | 0.0 | 47.6 | 0.0 | 25.0 | 100.0 | 3.7 |
| Al Qadeseya | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 5.0 |
| Al Muthana | 28.6 | 28.6 | 0.0 | 28.6 | 14.3 | 0.0 | 0.0 | 4.5 |
| Thee Qar | 63.3 | 0.0 | 0.0 | 33.3 | 3.3 | 4.2 | 100.0 | 2.6 |
| Misan | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 50.0 | 100.0 | 2.5 |
| Basra | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 3.0 |
| Kurdistan R. | | | | | | | | |
| Sulimaneya | 6.8 | 10.2 | 1.7 | 81.4 | 0.0 | 0.0 | 0.0 | 3.7 |
| Erbil | 23.8 | 16.7 | 0.0 | 57.1 | 2.4 | 3.9 | 0.0 | 3.4 |
| Dhook | 25.0 | 15.0 | 0.0 | 50.0 | 10.0 | 0.0 | 0.0 | 3.4 |
| Total | 32.4 | 15.3 | 0.2 | 48.8 | 3.0 | 4.4 | 26.3 | 3.5 |

Table No. (56): Costs of requirements used in waste management, wages of temporary and permanent laborers working in waste management, value of yearly depreciation of treatment equipment and costs of waste treatment at State and private hospitals by Governorate : 01/01/2008 – 30/06/2008

| | | | | | Thousand JD |
|-------------|---------|---|------------------------------------|--|--------------------------|
| Governorate | Type | Cost of requirements used in waste management | Wages of workers in waste handling | Cost of yearly depreciation of treatment equipment | Cost of waste management |
| Ninawa | State | 153987 | 154838 | 0 | 308825 |
| | Private | 1775 | 9000 | 0 | 10775 |
| Karkook | State | 36030 | 101000 | 24015 | 161045 |
| | Private | 1650 | 10200 | 0 | 11850 |
| Diala | State | 3745 | 134838 | 370 | 138953 |
| | Private | 1060 | 9000 | 0 | 10060 |
| Anbar | State | 74053 | 229138 | 13568 | 316759 |
| | Private | 2350 | 1200 | 180 | 3730 |
| Baghdad | State | 182423 | 410485 | 885 | 593793 |
| | Private | 106078 | 123830 | 3880 | 233788 |
| Babel | State | 73771 | 125410 | 130 | 199311 |
| | Private | 27040 | 13680 | 0 | 40720 |
| Karbala | State | 13160 | 94314 | 0 | 107474 |
| | Private | 2120 | 36600 | 0 | 38720 |
| Waset | State | 67185 | 80584 | 16630 | 164399 |
| | Private | 115 | 1800 | 0 | 1915 |
| Saladin | State | 42772 | 81280 | 745 | 124797 |
| | Private | 1180 | 3600 | 20 | 4800 |
| Najaf | State | 18204 | 29132 | 1185 | 48521 |
| | Private | 3066 | 3900 | 0 | 6966 |
| Al Qadeseya | State | 6157 | 88374 | 0 | 94531 |
| | Private | 4238 | 5100 | 0 | 9338 |

| | | | | | Thousand JD |
|---------------------|---------|---|------------------------------------|--|--------------------------|
| Governorate | Type | Cost of requirements used in waste management | Wages of workers in waste handling | Cost of yearly depreciation of treatment equipment | Cost of waste management |
| Al Muthana | State | 67240 | 362300 | 150 | 429690 |
| | Private | 460 | 4320 | 0 | 4780 |
| Thee Qar | State | 296292 | 524640 | 39200 | 860132 |
| | Private | 5230 | 10800 | 3500 | 19530 |
| Misan | State | 132990 | 185350 | 0 | 318340 |
| | Private | 0 | 0 | 0 | 0 |
| Basra | State | 13378 | 49860 | 1092 | 64330 |
| | Private | 4315 | 38350 | 270 | 42935 |
| Kurdistan R. | | | | | |
| Sulimaneya | State | 272608 | 763986 | 7720 | 1044314 |
| | Private | 13921 | 80890 | 1900 | 96711 |
| Erbil | State | 37700 | 262620 | 85950 | 386270 |
| | Private | 15030 | 58860 | 57500 | 79640 |
| Dhook | State | 34372 | 51450 | 0 | 85822 |
| | Private | 3820 | 22350 | 0 | 26170 |
| Total | State | 1526067 | 3729599 | 191640 | 5447306 |
| | Private | 193448 | 433480 | 15500 | 642428 |

N.B. data pertinent to yearly depreciation of treatment equipment were not provided at all health facilities in Governorates

Table No. (57): Costs of requirements used in waste management, wages of temporary and permanent laborers working in waste management, value of yearly depreciation of treatment equipment and costs of waste treatment at other health facilities (except hospitals) by Governorate : 01/01/2008 – 30/06/2008

| Governorate | Cost of requirements used in waste management | Wages of workers in waste handling | Cost of yearly depreciation of treatment equipment | Thousand JD |
|--------------|---|------------------------------------|--|--------------------------|
| | | | | Cost of waste management |
| Ninawa | 4307 | 158009 | 0 | 162316 |
| Karkook | 11995 | 118662 | 1120 | 131777 |
| Diala | 1455 | 73665 | 120 | 75240 |
| Anbar | 36780 | 69225 | 3616 | 109621 |
| Baghdad | 77890 | 491622 | 2075 | 571587 |
| Babel | 13052 | 147270 | 5 | 160327 |
| Karbala | 15155 | 101624 | 0 | 116779 |
| Waset | 8279 | 73121 | 0 | 81400 |
| Saladin | 23776 | 77590 | 340 | 101706 |
| Najaf | 11502 | 52734 | 0 | 64236 |
| Al Qadeseya | 748 | 172830 | 0 | 173578 |
| Al Muthana | 8085 | 114342 | 0 | 122427 |
| Thee Qar | 77279 | 161210 | 61725 | 300214 |
| Misan | 71150 | 90962 | 0 | 162112 |
| Basra | 13591 | 145838 | 2398 | 161827 |
| Kurdistan R. | | | | |
| Sulimaneya | 55929 | 528513 | 42175 | 626617 |
| Erbil | 46860 | 183970 | 47050 | 277880 |
| Dhook | 10135 | 163370 | 0 | 173505 |
| Total | 487968 | 2924557 | 160624 | 3573149 |

Table No. (58): Amount and cost of power consumption at State and private hospitals by Governorates : 01/01/2008 – 30/06/2008

| Governorate | Type | Thousand JD | | | | | | | |
|-------------|---------|----------------|-------|--------------|-------|----------------|--------|----------------|--------|
| | | Water | | Domestic gas | | Gasoline | | Kerosene | |
| | | M ³ | Cost | Amount (No.) | Cost | Amount (liter) | Cost | Amount (liter) | Cost |
| Ninawa | State | 216075 | 4919 | 4545 | 25664 | 261558 | 110711 | 1564633 | 383313 |
| | Private | 8400 | 360 | 24 | 192 | 0 | 0 | 33500 | 8532 |
| Karkook | State | 56521 | 11104 | 1440 | 7500 | 8813 | 3575 | 225000 | 100000 |
| | Private | 6432 | 1286 | 0 | 0 | 75 | 50 | 66900 | 36976 |
| Diala | State | 28136 | 7755 | 965 | 9595 | 58000 | 30080 | 687200 | 344100 |
| | Private | 1402 | 270 | 0 | 0 | 0 | 0 | 25560 | 16703 |
| Anbar | State | 131640 | 17106 | 2146 | 29862 | 205140 | 107314 | 609570 | 345998 |
| | Private | 540 | 108 | 30 | 450 | 0 | 0 | 10000 | 5850 |
| Baghdad | State | 847898 | 72525 | 8623 | 82134 | 732820 | 333459 | 1726119 | 680809 |
| | Private | 94274 | 7373 | 418 | 4508 | 26940 | 18240 | 1178072 | 686807 |
| Babel | State | 84350 | 4679 | 60897 | 24750 | 224856 | 101185 | 383100 | 175880 |
| | Private | 7620 | 363 | 0 | 0 | 40 | 25 | 63360 | 25630 |
| Karbala | State | 2860 | 170 | 782 | 2354 | 21974 | 9713 | 118440 | 40632 |
| | Private | 940 | 57 | 0 | 0 | 0 | 0 | 45680 | 15988 |
| Waset | State | 205004 | 17157 | 2924 | 14690 | 76827 | 33427 | 226000 | 92809 |
| | Private | 1600 | 13 | 0 | 0 | 0 | 0 | 14400 | 6480 |
| Saladin | State | 74937 | 3462 | 1183 | 10580 | 73069 | 33977 | 343220 | 148363 |
| | Private | 4005 | 120 | 18 | 270 | 360 | 180 | 26400 | 10560 |
| Najaf | State | 138680 | 16310 | 1457 | 7485 | 90221 | 40599 | 272388 | 99341 |
| | Private | 3440 | 682 | 6 | 60 | 0 | 0 | 37571 | 13150 |
| Al Qadeseya | State | 25150 | 5604 | 0 | 0 | 98316 | 42892 | 75614 | 29985 |
| | Private | 5500 | 441 | 10 | 45 | 0 | 0 | 39600 | 19800 |
| Al Muthana | State | 11386.5 | 5210 | 7558 | 32790 | 0 | 0 | 136000 | 53600 |
| | Private | 185 | 42 | 0 | 0 | 0 | 0 | 7200 | 2520 |
| Thee Qar | State | 57380 | 1861 | 56 | 3545 | 0 | 0 | 197000 | 79150 |
| | Private | 540 | 20 | 0 | 0 | 0 | 0 | 7200 | 2520 |

| Governorate | Type | Thousand JD | | | | | | | |
|---------------------|---------|----------------|--------|--------------|--------|----------------|---------|----------------|---------|
| | | Water | | Domestic gas | | Gasoline | | Kerosene | |
| | | M ³ | Cost | Amount (No.) | Cost | Amount (liter) | Cost | Amount (liter) | Cost |
| Misan | State | 111800 | 46036 | 2183 | 25281 | 55701 | 25064 | 244143 | 85450 |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Basra | State | 129686 | 13291 | 5486 | 34648 | 190952 | 85189 | 336518 | 118200 |
| | Private | 8991 | 4262 | 260 | 1764 | 9424 | 4510 | 373872 | 137885 |
| Kurdistan R. | | | | | | | | | |
| Sulimaneya | State | 139131 | 692 | 4824 | 56490 | 174590 | 107981 | 380200 | 166087 |
| | Private | 7630 | 1073 | 38 | 254 | 300 | 760 | 69255 | 29254 |
| Erbil | State | 39410 | 3053 | 6493 | 26371 | 169450 | 104088 | 559520 | 313771 |
| | Private | 1860 | 326 | 111 | 792 | 1400 | 1530 | 85420 | 231060 |
| Dhook | State | 501167 | 15011 | 708 | 5076 | 68400 | 26664 | 633350 | 262448 |
| | Private | 20830 | 1110 | 0 | 0 | 0 | 0 | 87132 | 108322 |
| Total | State | 2801211.5 | 245945 | 112783 | 398815 | 2510687 | 1195918 | 8718015 | 3519936 |
| | Private | 174189 | 17906 | 915 | 8335 | 38539 | 25295 | 2171122 | 1358037 |

Table No. (58): Amount and cost of power consumption at State and private hospitals by Governorates : 01/01/2008 – 30/06/2008 (CONT'D)

| | | | | | | | | | | | Thousand JD | |
|-------------|---------|--------------|------|------------------|-------|----------------|------|--------------|------|-----------------|-------------|--|
| Governorate | Type | Coal | | Generator grease | | Naphtha | | Liquid gas | | Lubricating oil | | |
| | | Amount (ton) | Cost | Amount (liter) | Cost | Amount (liter) | Cost | Amount (ton) | Cost | Amount (liter) | Cost | |
| Ninawa | State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Karkook | State | 0 | 0 | 2075 | 2075 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 310 | 310 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Diala | State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Anbar | State | 0 | 0 | 13649 | 40811 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Baghdad | State | 0 | 0 | 13420 | 33823 | 0 | 0 | 0 | 627 | 0 | 0 | |
| | Private | 0 | 0 | 69736 | 89175 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Babel | State | 0 | 0 | 2200 | 1801 | 0 | 0 | 3 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 1950 | 3300 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Karbala | State | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 1400 | 0 | 0 | |
| | Private | 0 | 0 | 320 | 960 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Waset | State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Saladin | State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Najaf | State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Al Qadeseya | State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 600 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Al Muthana | State | 0 | 0 | 2215 | 2215 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 150 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | |

| | | | | | | | | | | | Thousand JD | |
|--------------|---------|--------------|------|------------------|--------|----------------|------|--------------|------|-----------------|-------------|--|
| Governorate | Type | Coal | | Generator grease | | Naphtha | | Liquid gas | | Lubricating oil | | |
| | | Amount (ton) | Cost | Amount (liter) | Cost | Amount (liter) | Cost | Amount (ton) | Cost | Amount (liter) | Cost | |
| Thee Qar | State | 0 | 0 | 1535 | 3070 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 180 | 360 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Misan | State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Basra | State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1040 | 0 | |
| | Private | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Kurdistan R. | | | | | | | | | | | | |
| Sulimaneya | State | 0 | 0 | 90990 | 19254 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 22460 | 6525 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Erbil | State | 600 | 450 | 6920 | 13510 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 400 | 900 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Dhook | State | 0 | 0 | 17500 | 7620 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Private | 0 | 0 | 1070 | 428 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | State | 600 | 400 | 150504 | 124179 | 0 | 0 | 17 | 2027 | 1040 | 0 | |
| | Private | 0 | 0 | 96876 | 102708 | 0 | 0 | 0 | 0 | 0 | 0 | |

Table No. (59): Amount and cost of power consumption at other health facilities (except hospitals) by Governorates: 01/01/2008 – 30/06/2008

| Governorate | Thousand JD | | | | | | | |
|--------------|-----------------|--------------|--------------|--------------|----------------|---------------|----------------|----------------|
| | Water | | Ordinary gas | | Gasoline | | Kerosene | |
| | M ³ | Cost | Amount (No.) | Cost | Amount (liter) | Cost | Amount (liter) | Cost |
| Ninawa | 53265 | 2953 | 238 | 2069 | 4500 | 2193 | 148300 | 52643 |
| Karkook | 11554 | 3825 | 3 | 18 | 960 | 384 | 230234 | 91994 |
| Diala | 3174 | 558 | 26 | 390 | 6400 | 3180 | 67380 | 32600 |
| Anbar | 9261 | 1179 | 268 | 2478 | 18812 | 11645 | 109805 | 58420 |
| Baghdad | 159411 | 7780 | 492 | 5247 | 96269 | 49404 | 1441907 | 540078 |
| Babel | 20730 | 1181 | 41 | 207 | 15020 | 6859 | 125584 | 51394 |
| Karbala | 6525 | 470 | 68 | 400 | 0 | 0 | 161580 | 56475 |
| Waset | 16160 | 859 | 30 | 185 | 16821 | 7065 | 56674 | 25652 |
| Saladin | 5747 | 1319 | 32 | 336 | 10980 | 5160 | 113060 | 46343 |
| Najaf | 16757 | 2734 | 61 | 460 | 16816 | 7458 | 79920 | 28298 |
| Al Qadeseya | 10994 | 3675 | 0 | 0 | 0 | 0 | 139750 | 57700 |
| Al Muthana | 9036.2 | 1239 | 78 | 390 | 0 | 0 | 170230 | 59581 |
| Thee Qar | 20051 | 669 | 51 | 261 | 3000 | 1050 | 110618 | 40762 |
| Misan | 10556 | 870 | 282 | 3030 | 35400 | 15930 | 248820 | 87562 |
| Basra | 21382 | 8551 | 183 | 1070 | 11580 | 4649 | 166284 | 58262 |
| Kurdistan R. | | | | | | | | |
| Sulimaneya | 53590 | 1452 | 620 | 4400 | 63630 | 35936 | 202431 | 76929 |
| Erbil | 8517 | 2878 | 202 | 1430 | 49450 | 59320 | 288720 | 144582 |
| Dhook | 8100 | 3540 | 64 | 509 | 14600 | 6570 | 238070 | 96646 |
| Total | 444810.2 | 45732 | 2739 | 22880 | 364238 | 216803 | 4099367 | 1605921 |

Table No. (59): Amount and cost of power consumption at other health facilities (except hospitals) by Governorates: 01/01/2008 – 30/06/2008 (CONT'D)

| Governorate | Thousand JD | | | | | | | | | |
|--------------|--------------|------|------------------|-------|----------------|------|--------------|------|-----------------|------|
| | Coal | | Generator grease | | Naphtha | | Liquid gas | | Lubricating oil | |
| | Amount (ton) | Cost | Amount (liter) | Cost | Amount (liter) | Cost | Amount (ton) | Cost | Amount (liter) | Cost |
| Ninawa | 0 | 0 | 0 | 0 | 3700 | 1220 | 0 | 0 | 0 | 0 |
| Karkook | 0 | 0 | 5541 | 5541 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diala | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anbar | 0 | 0 | 3117 | 9313 | 1000 | 845 | 0 | 0 | 0 | 0 |
| Baghdad | 0 | 0 | 14452 | 18415 | 460 | 100 | 0 | 0 | 0 | 0 |
| Babel | 0 | 0 | 3190 | 3061 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karbala | 0 | 0 | 0 | 0 | 2500 | 500 | 0 | 0 | 0 | 0 |
| Waset | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Saladin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Najaf | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Qadeseya | 0 | 0 | 60 | 60 | 0 | 0 | 0 | 0 | 0 | 0 |
| Al Muthana | 0 | 0 | 3420 | 3420 | 0 | 0 | 0 | 0 | 0 | 0 |
| Thee Qar | 0 | 0 | 1927 | 3790 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Basra | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kurdistan R. | | | | | | | | | | |
| Sulimaneya | 0 | 0 | 66550 | 16104 | 0 | 0 | 0 | 0 | 0 | 0 |
| Erbil | 0 | 0 | 3150 | 7825 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dhook | 0 | 0 | 6800 | 1600 | 400 | 80 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 108207 | 69129 | 8060 | 2745 | 0 | 0 | 0 | 0 |

Republic of Iraq

Ministry of Planning and Development Cooperation
Central Organization for Statistics & Information
Technology

Environmental Statistics Directorate

Kurdistan Region Statistic
Office

Ministry of Health



SUMMARY REPORT OF:

“ENVIRONMENTAL SURVEY OF MEDICAL SERVICES ACTIVITIES IN IRAQ IN 2008”



Republic of Iraq

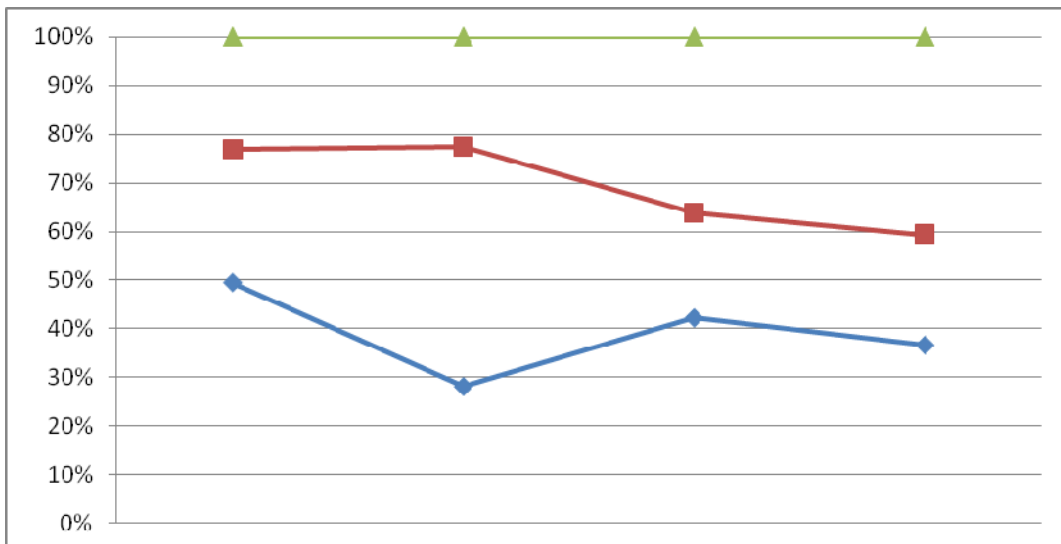
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SUMMARY REPORT OF: “ENVIRONMENTAL SURVEY OF MEDICAL SERVICES ACTIVITIES IN IRAQ IN 2008”



August, 2009

Environmental Survey of Medical Services Activities in Iraq in 2008

1- Preface

1.1 Introduction

Medical services sector provides citizens with health care through the services it offers in fields of examination, treatment and surgery. While this sector endeavors to protect citizen's health and prevent spread of disease, it might be a cause of effecting health and environmental hazards. This could happen if proper and safe methods are not applied in handling waste which is generated in the course of carrying out day-to-day work, and also, if such waste is not disposed of in an appropriate manner whether inside or outside health facilities. In particular, hazardous waste, containing pathological and infectious agents, and chemical and radioactive wastes may pose health hazards to patients and workers inside those facilities, and to the community and environment if such wastes are mixed with the rest of health facility waste and disposed of to the external environment without carrying out the necessary treatment.

Hence, it has become essential to identify the amounts of waste generated and the methods applied in its collection, segregation, transportation and disposal. It is essential, as well, to identify the amounts of water consumed and wastewater generated, including treatment used to dispose of the latter, methods of dealing with gaseous pollutants resulting from waste incineration, workers in this field and the level of environmental awareness they have. All of that can be achieved through conducting an extended survey that includes health facilities. This survey is considered the first of its kind in Iraq.

1.2 Survey objectives

This survey aims to provide a database on all aspects relevant to the actual picture of health facilities environment through the following indicators:

- 1- Number of health facilities by types, number of wards and operating theatres,
- 2- Number of inpatients, outpatients, days of inpatient care and bed occupancy rate,
- 3- Number, amounts and types of commodities requirements used and consumed at health facilities,
- 4- Volume of consumed water and generated wastewater and wastewater disposal methods,
- 5- Amount of waste generated (hazardous or ordinary), disposal methods, waste collection and transportation and regulations implemented in waste management,

Environmental Survey of Medical Services Activities in Iraq in 2008

6- Number of working cadres and the level of their educational qualification and environmental awareness,

7- Amounts and costs of fuel and power consumed at health facilities and costs of waste treatment.

1.3 Anticipated results and benefits from the survey

1- Assessment of Governorates population needs for either new health facilities, or just expansion and development of existing ones, depending on results and statistics of bed occupancy rate and number of patients,

2- Identification of the actual need for the most commonly used material and medical requirements,

3- Identification of the need for waste incinerators and sterilization equipment for reusable medical instruments, or any other modern equipment that need be imported for waste treatment, or prevention of environmental pollution,

4- Identification of volume and sources of water used in health facilities, and methods of disposal of wastewater. This is required to determine the actual need for safe water, and endeavor to make filtration and treatment units available, should the necessity arise,

5- Provision of data on amounts of ordinary and hazardous waste, its collection and transportation requirements and treatment method used. This is meant to help develop waste management systems and provide high tech treatments,

6- Identifying number of cadres working in this field and the level of personal protection, environmental awareness and education they have. This is intended to work on promoting worker's efficiency and protecting him from occupational hazards,

7- Determination of the actual need of energy required for health facilities in order to provide quality services.

In light of the above, this survey provides an opportunity for decision makers from environmental and health entities to evaluate health facilities, work on upgrading its environmental condition, lay down new regulations pertinent to waste management, prepare programs aimed at raising the awareness of workers involved in those facilities and lay down, or upgrade guidelines and legislations and anything else that aims at the provision of quality services for patients and prevention of hazards to human health and environment ,that could result from these activities.

Environmental Survey of Medical Services Activities in Iraq in 2008

1.4 Problems and challenges

Execution of survey had been through problems and challenges basically attributed to modernity of survey, unavailability of forms or a lack of past primary comprehensive database on such type of specialized surveys.

The following is a summary of the most important problems and challenges:

1- Gross deficit, at health facilities administration, in data documentation and formal records of types of waste and amounts of generated and incinerated waste,

2- Because of unavailability of water bills at most health facilities, estimation of water consumption was based on the number of water storage tanks in those facilities and the frequency of filling in tanks per day,

3- Difficulty in obtaining the required data because of routine procedures existing at some health facilities; a factor that delayed receiving survey forms,

4- Difficulty in obtaining precise technical information on incinerators specifications due to lack of necessary expertise among the majority of workers in hospitals, especially those in charge of incinerators,

5- Deficiency of required experience of employees of Environmental Statistics Directorate. In addition, there was a need for information about the experience in surveys of other countries which have experience in this field. This problem was the major challenge encountered by the directorate in auditing the logicity of data.

2- Research methodology and survey execution

2.1 Level of representation

The survey included all State and private hospitals, central health laboratories, chest disease clinics, specialized dental centers, allergic diseases and asthma centers, specialized health centers, forensic medicine and blood banks. In addition, it included general health centers (main centers only). The survey included (197) State hospitals, (80) private hospitals and (669) other health facilities. In addition, there are (43) health facilities that are either non functioning, or undergoing rehabilitation. The survey was conducted at the level of all Governorates of Iraq, including Governorates of Kurdistan Region.

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2.2 Questionnaire form

Due to the modernity of this type of survey in the Central Organization for Statistics and Information Technology, the survey questionnaire attained great importance. It was prepared in light of questionnaires of medical environmental surveys which were executed in some countries. The questionnaire was presented to a number of national and international experts and entities to enrich it with their opinions and knowledge. Of those entities are:

- 1- Ministry of Environment.
- 2- Ministry of Health.
- 3- United Nations International Children Fund (UNICEF).
- 4- World Health Organization (WHO).
- 5- Environmental Statistics Directorate / Jordan.
- 6- National Accounts Directorate / Central Organization for Statistics.
- 7- Social Statistics Directorate / Central Organization for Statistics.

Moreover, a local environmental expert was contracted to prepare the final draft of the form, examine data logicality, analyze statistical data and participate in the preparation of the final report.

2.4 Training

Training process of technical cadres attained great importance. It was not limited to technical cadres only, but included, as well, committee members, central supervisors, clerical auditors and data processors. In addition, a team of two field researchers participated in the field work; One of them was an employee at the Central Organization for Statistics and Information Technology, the other researcher was employed at the Ministry of Health in Baghdad and Governorates.

2.5 Steps of work execution

Steps of work execution are briefed as follows:

- 1- Preparation of a primary plan encompassing detailed objectives, time schedule and mechanism of work,
- 2- Field work. Depending on the volume of work allover Governorates of Iraq, field work continued for a (20-25) days period. A transportation vehicle was allocated to members of field teams and central supervisors,

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3- Clerical work: After the completion of field work, questionnaires were subjected to a series of clerical work, the most important of which were checking the logicity of provided data, coding the questionnaires, data entry into the computer using Oracle program and the final data processing,

4- Results checking. This step passed through the following stages:

- * As a preliminary stage, data logicity was checked by survey expert and Environmental Statistics Directorate,

- * Results were presented to the higher committee of survey. The committee submitted its suggestions and comments. Corrections were performed in light of what was provided by the said committee,

- * Ministry of Health. A technical committee was formed in the Ministry of Health. The committee reviewed the survey reports and provided its comments,

- * Ministry of Higher Education and Scientific Research,

- * Experts from World Health Organization (WHO),

- * Social Statistics Directorate at the Central Organization for Statistics.

7- Analysis of results

After extraction of tables of environmental survey of medical services activities in Iraq, the following was shown:

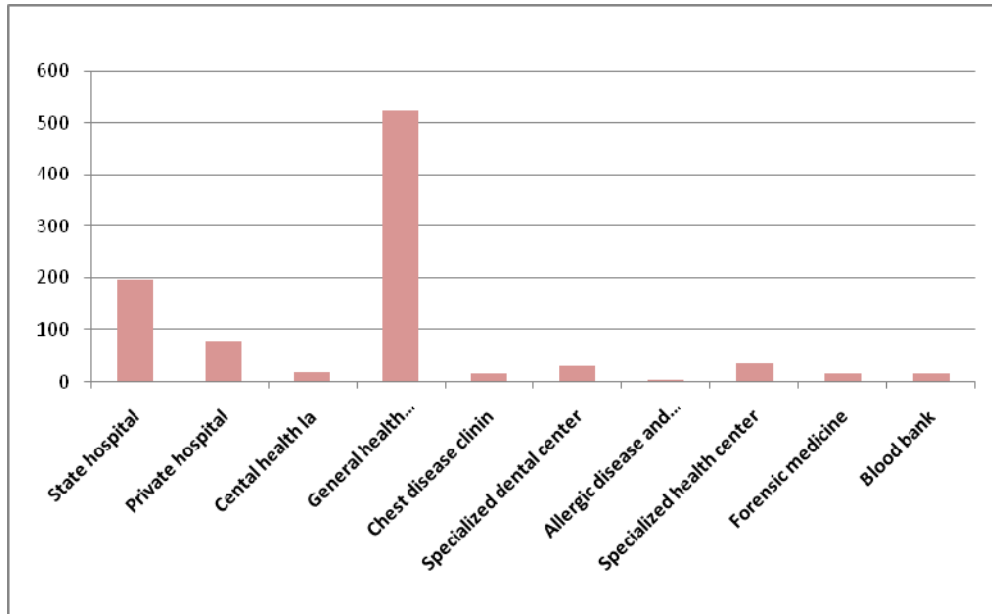
1- Number of health facilities included in the survey totaled to (946) of practically functioning facilities. In addition, a small number (43) of health facilities were either non functioning, or undergoing rehabilitation.

The survey covered all State hospitals in Iraq Governorates that summed up to (197) hospitals, the majority of which, or (39) State hospitals, were centrally located in Baghdad. Sulaimanya came next with (21) State hospitals, and the least number of State hospitals was in Al Muthanna Governorate with (4) hospitals; the reason for this small number is the small population of Al Muthanna compared with the rest of Governorates.

In addition, the survey covered private hospitals that totaled to (80) hospitals. Of this number (35) hospitals are in Baghdad. Private hospitals are available in all Governorates except Misan.

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Number of health centers by type



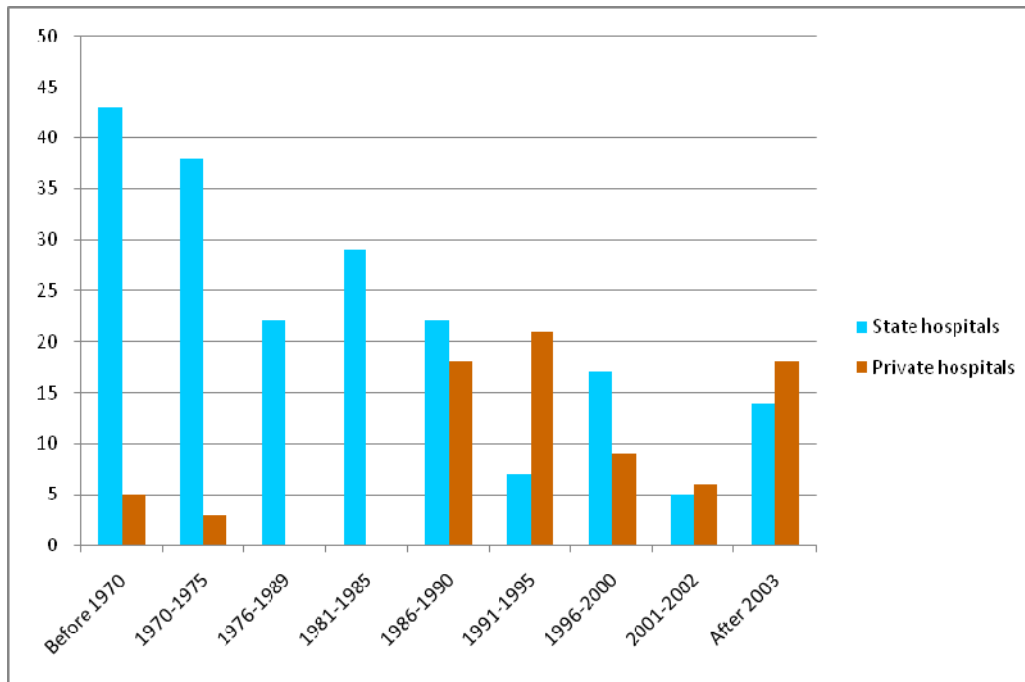
The number of main health centers summed into (523) centers. It comprised (108) general health center (Main) in Baghdad Governorate, followed by Ninawa and Sulaimaneya with (43) center in each. The least number of those centers was in Diala Governorate with (11) centers (Main). Other health facilities included in the survey were (146) health center comprising central clinical laboratories, forensic medicine, blood banks, specialized health centers etc.

2- The growth of the construction of State hospitals attained its peak in the seventies. The number of newly constructed State hospitals then totaled to (60) hospitals. Afterward, the number started a decline that continued till the current decade. That was attributed to a decline in health development projects because of the sanctions and war conditions.

It is noted that after 2003, only 14 State hospitals were constructed, most of which concentrated in Sulimaneya and Erbil.

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Number of State and private hospitals by year of construction



3- Most private hospitals were constructed late in the eighties and nineties in all Governorates. It is also noted that no private hospital was constructed in the period (1976-1985), but after 2003, (18) private hospitals were constructed; 8 of which in Kurdistan Region.

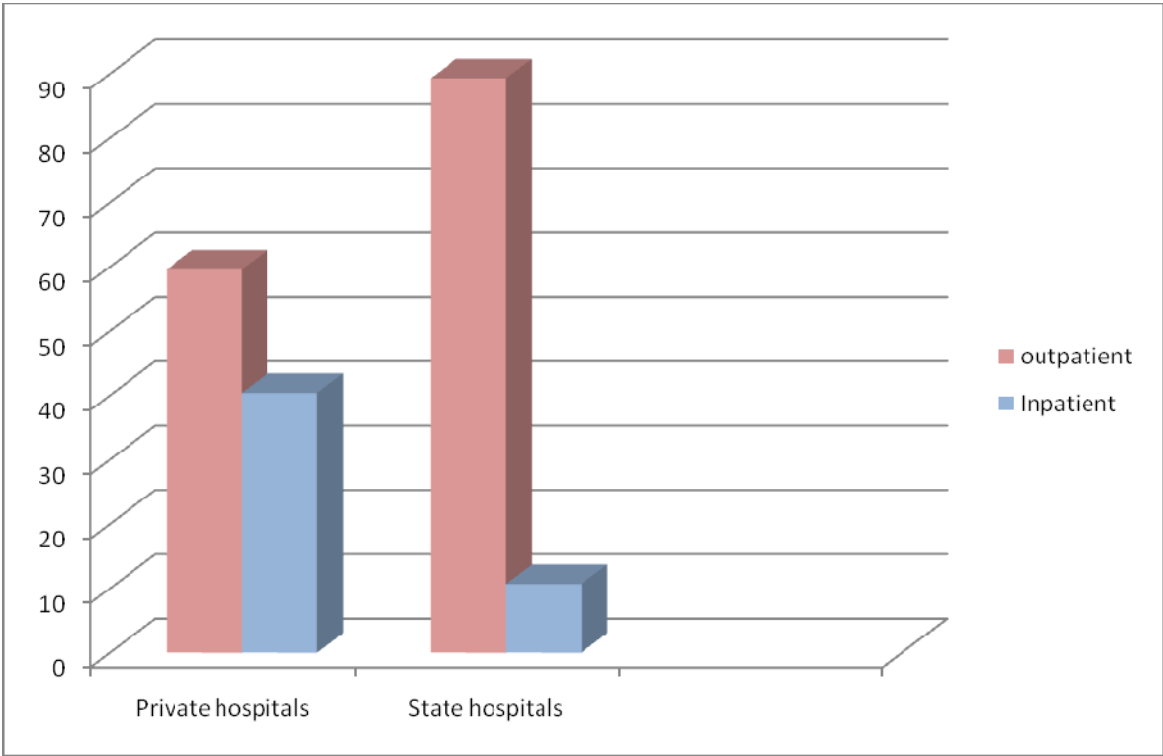
4- Number of male and female inpatients in State hospitals in the period 1 Jan., 2008 – 30 June, 2008 totaled to (1190881), while the number of male and female outpatients in State hospitals in the same period was (9972138).

Number of male and female inpatients in private hospitals in the same period was (91348), while outpatients' number was (134954) with a higher percentage of females in inpatients and outpatients in both types of hospitals.

The percentage of Inpatients of the total number of patients (Inpatients and outpatients) in State hospitals was (10.7%), while the percentage in private hospitals was (40.4%). It could be inferred from such data that State hospitals receive large numbers of outpatients seeking examination and treatment because of limited charges and availability of medications. In private hospitals, outpatients' number decreases and inpatients' number increases because of the nature of health services offered at those hospitals which is in the form of surgical operations and deliveries.

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Percentage of inpatients and outpatients in State and private hospitals



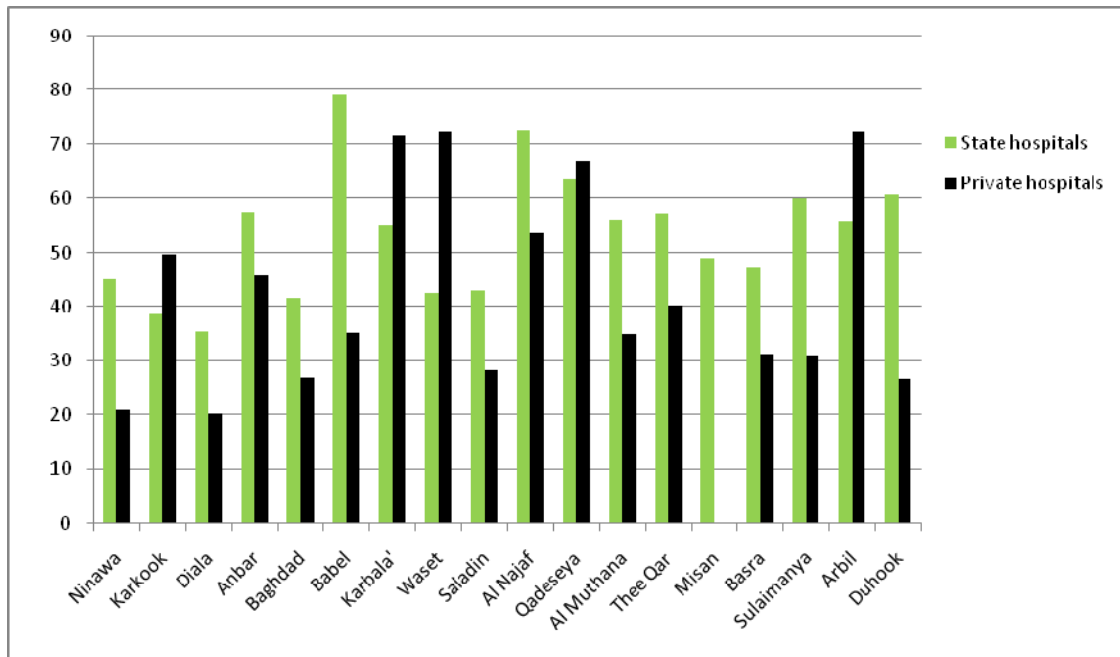
5- The bed occupancy rate at State hospitals was (49.8%), while at private hospitals the rate was (34.8%). The highest bed occupancy rate at State hospitals was in Babel Governorate where it hit (79.1%), and the least (35.5%) was in Diala Governorate.

Bed occupancy rate is calculated according to the following formula:

$$\text{Bed occupancy rate \%} = \frac{\text{No. of in hospital days of all patients in the 6 months period}}{\text{No. of beds equipped for inpatients X 182 days}} \times 100$$

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Bed occupancy rate at State and private hospitals

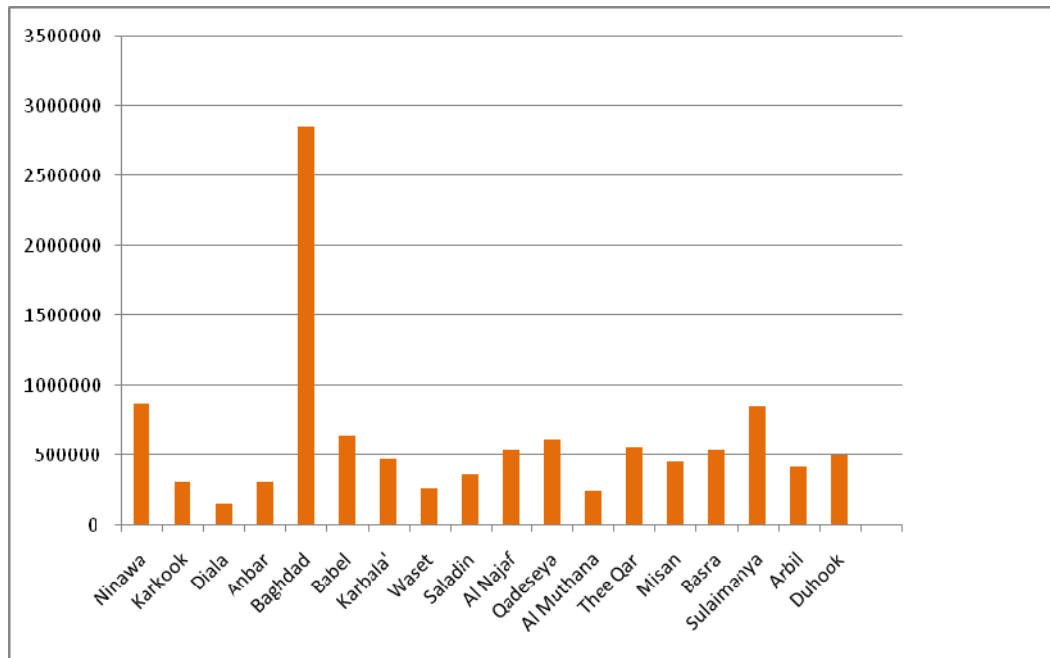


6- In the six months period, the outpatients' number at other health facilities included in the survey (except hospitals) totaled to (10944390). The variation in numbers among Governorates is obvious. Baghdad Governorate had the largest number of outpatients where they summed into (2857377), while the least number was in Diala Governorate where it was (147785).

The number of outpatients at general health centers (main) was (9352994), and outpatients at forensic medicine was (18415).

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The number of outpatients at other health facilities



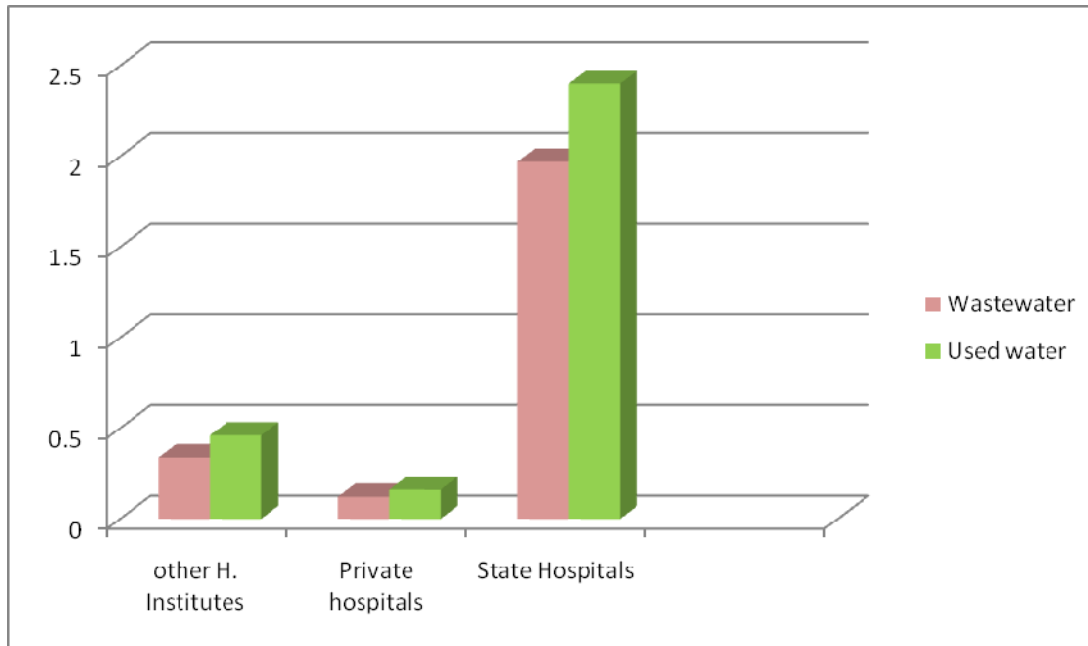
7- The volume of used water at State hospitals in the six months period was (2.4) million cubic meters, while at private hospitals it totaled to (0.16) million cubic meters. The volume of water consumed per patient at State and private hospitals was (211) and (698.8) liter / patient respectively. The consumption depends on the nature of work of those hospitals, kind of health services offered and type of patients. At private hospitals, the majority of patients are inpatients accompanied by escorts, and health services are mainly surgical operations and deliveries, whilst at State hospitals, the majority are outpatients. It is to be noted that the term "used water" comprises all uses of water including drinking water, water for cleaning outside yards and cooling water, if available.

The volume of used water at other facilities was (0.46) million cubic meters. This indicates that the patient's consumption of water per day was (40) liters, noting that all patients were outpatients.

The most common source of water used at all health facilities, including hospitals, is the network of running water. Kurdistan region is famed for utilization of wells water as an additional source.

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Volume of used water and wastewater at State and private hospitals and other health facilities /Million Cubic Meters



8- The volume of wastewater generated at State hospitals in the six months period was (1.97) cubic meters, of which (0.2%) was treated at treatment units, (70.6%) was discarded to sewer network and (15.4%) was collected in sealed septic pits.

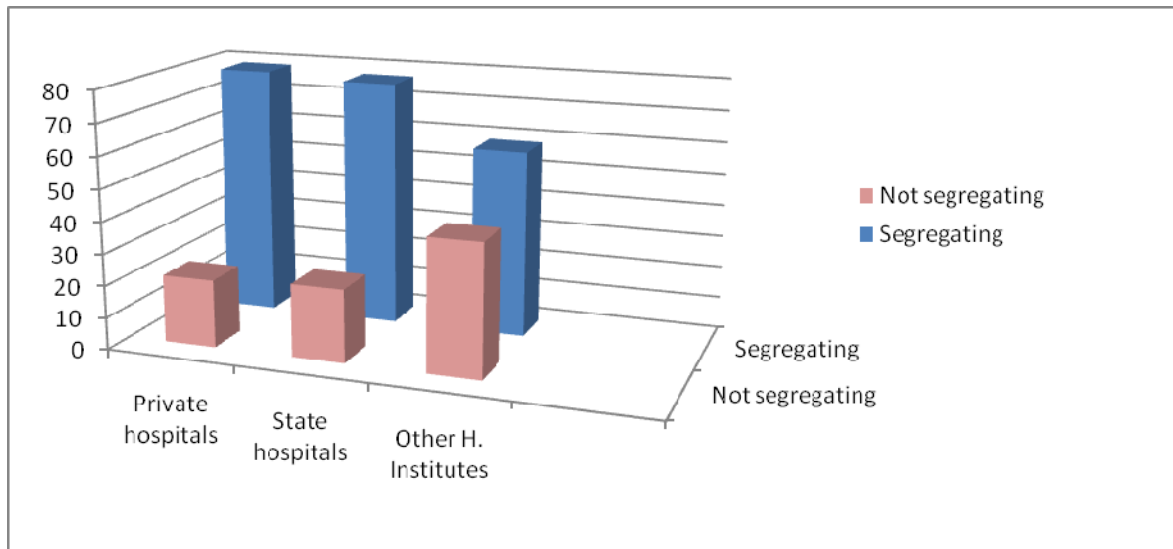
The amount of wastewater in private hospitals in the six months period totaled to (122.7) thousand cubic meters; (80.8%) were discarded to sewer network and (18.4%) were collected in sealed septic pits.

The wastewater amount at other health facilities totaled to (338) thousand cubic meters, of which (70.2%) was discarded to sewer network, and (25.5%) was collected in sealed septic pits.

It is worthy to mention that there is no treatment, at all, of wastewater generated at private hospitals and other health facilities. The percentages shown have serious significance, because most of the generated wastewater drains into sewer network and, subsequently, to rivers without any treatment of its hazardous contents.

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Percentage of health facilities implementing / not implementing regulations of segregation



9- State hospitals committed to segregation of medical hazardous waste separate from ordinary waste constituted (77.1%), whilst the percentage of commitment to segregation of private hospitals was (78.7%). The rest of health facilities were committed to segregation in (58.6%) of cases. Percentage of Commitment to segregation differs among Governorates. Segregation by implementation of color coding is dependent on type of health facility; whether a State or private hospital, or a health centeretc.

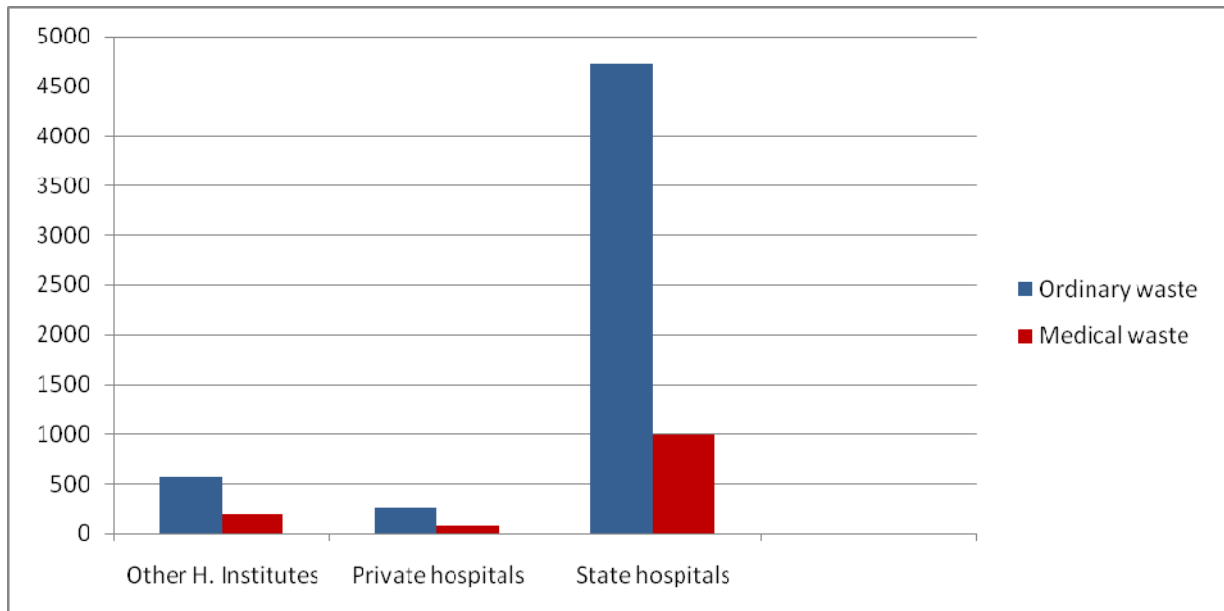
Yellow color, which is the color approved by WHO, was noted to be the most commonly used for bags and hazardous medical waste containers

10- The amounts of ordinary waste disposed by State hospital in the six months period was (990) thousand Kg., or (5.4) thousand Kg. per day. Private hospitals disposed (76.4) thousand Kg. in the six months, or (0.4) thousand Kg. per day. The rest of health facilities disposed (194) thousand Kg. in the six months, or (1.3) thousand Kg. per day.

The most common method of final disposal of hazardous waste used in State hospitals and other health facilities is incineration in private incinerators located onsite. In private hospitals, the most commonly used method is incineration outside the location in a central incinerator.

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Amounts of medical and ordinary waste generated at health facilities in six months (Ton)



There is an amount of radioactive waste totaling to (76) Kg/day that is generated at hospitals specializing in the nuclear medicine and treatment of tumors. Those hospitals are located in Baghdad, Ninawa and Kurdistan region. Though of a relatively small amounts compared to the total waste generated by all health facilities, yet such waste is considered very hazardous due to the hazardous nature of its constituents and the long standing effects on human and environment.

11- In the six months period, the amount of ordinary waste disposed by State hospitals summed into (4.7) million Kg. or (26) thousand Kg. per day, while private hospitals disposed (252) thousand Kg., or (1.4) thousand Kg. per day. Other health facilities disposed (559) thousand Kg., or (3.7) thousand Kg. per day.

12- Further to the above mentioned information about waste segregation, only (45) State hospitals, or (22.8% of all state hospitals) , (17) private hospitals, or (21.3% of all private hospitals) and (227) of other health facilities, or (41.4% of all other health facilities included in the survey), do not implement the regulation of waste segregation. Noting that the majority of health facilities included in the survey lacked records of data documentation.

In the six months period, the total waste disposed by State hospitals not committed to the regulation of waste segregation (unsegregated waste) amounted to (522) thousand Kg., or (2.9)

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thousand Kg. per day, private hospitals disposed (82.5) thousand Kg. , or (0.4) thousand Kg per day and other health facilities disposed (424) thousand Kg., or (2.8) thousand Kg. per day. Being unsegregated, such wastes should be handled as hazardous waste. However, the most common method used in the disposal of this waste is handing it to the municipality for either landfilling or burning.

13-According to WHO sources, the ratio between hazardous medical waste and total waste at health facilities that segregate the waste ranges between (10%-25%). Reviewing the survey results shows that the ratios at State hospitals, private hospitals and other health facilities were 17%, 23% and 25% respectively, which is within the averages shown above.

The amounts of generated total waste / patient / day at State hospitals and private hospitals are (0.6) Kg. and (1.8) Kg. respectively.

The amount of waste generated by inpatients at State hospitals and private hospitals is (5.2) Kg. and (4.5) Kg / inpatient / day respectively.

The amount of total waste generated per bed at State hospitals and private hospitals was (1.02) Kg. and (1.01) Kg. / bed / day respectively. Comparing these figures with international data shows that the amount of generated waste / bed / day at health facilities of East Mediterranean Countries, according to WHO sources, is (1.3-3) Kg. / bed / day.

The amount of waste generated / bed / day in Tehran hospitals is (2.7) Kg. and in hospitals of Dhaka, Bangladesh is (1.93) Kg./bed/day and (0.52) Kg./patient/day.

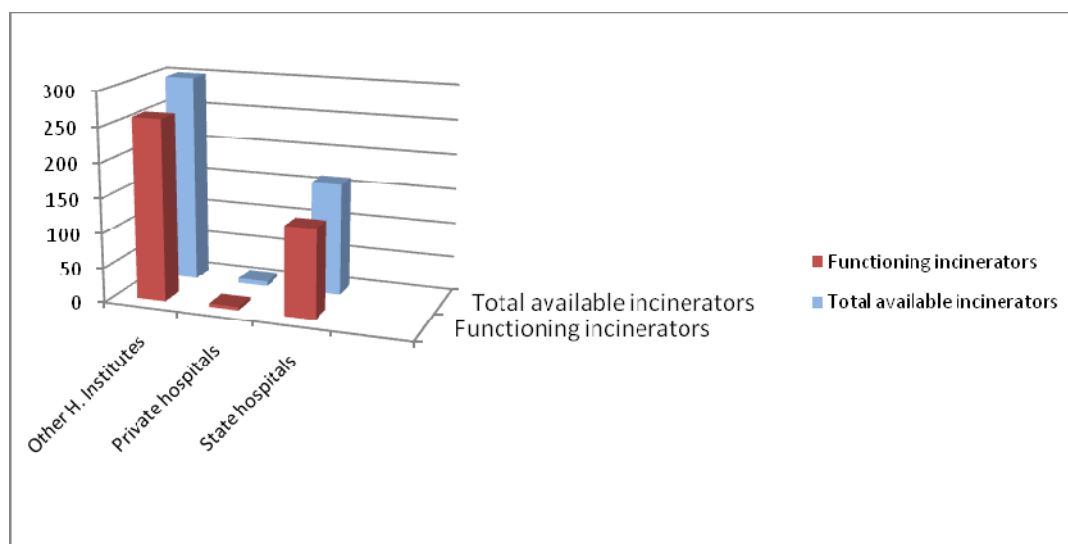
It is noted that the amount of generated waste per bed or patient per day varies among countries, depending on population culture and type and level of health services offered.

14- The number of workers in charge of waste collection and transportation services at State hospitals summed into (3712) workers; those trained on the hazards of wastes constituted (35.5%). At private hospitals, the number was (339) workers with the percentage of trained workers amounting to (26.2%), while in other health facilities, the number of workers was (2280); with trained workers constituting (16.4%).

15- The number of incinerators at State hospitals totaled to (162), of which (128) incinerators were functioning and (94) incinerators conformed to environmental standards. At private hospitals, incinerators summed into (7); (5) functioning and (3) in conformity with Environmental standards. Finally, there were (261) incinerators in other health facilities; (261) functioning ones, and (79) incinerators conforming to environmental standards. This data is according to the information provided by the administrations of health facilities.

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Total number of incinerators and number of functioning incinerators in health facilities



16- The estimated amounts of incinerated waste in the six months are (2.27) million Kg. in State hospitals, (28.4) thousand Kg. in private hospitals and (546) thousand Kg. in other health facilities.

17- The costs, in million Iraqi Dinars, of requirements used in waste management in the six months were (1526.1) in State hospitals, (103.4) in private hospitals and (487.9) in other health facilities.

The total costs in the six months period, in million Iraqi Dinars, of waste treatment, including requirements used in waste management, labor wages and the value of yearly depreciation of used equipment, were (5447.3) in State hospitals, (642.4) in private hospitals and (3573.1) in other health facilities.