

# Study team finds one-third of Iraqi children are malnourished

An International Study Team organized by the Harvard University School of Public Health, Oxford University, and the London School of Economics has provided new evidence on the genocide being imposed on Iraq by continuing U.N.-imposed sanctions. The team, which was composed of 87 physicians, engineers, and other researchers, visited Iraq from Aug. 23 to Sept. 5 in order to study the health and welfare of the country's children. On Oct. 22, the team released a report, titled "Health and Welfare in Iraq after the Gulf Crisis." EIR will be publishing a series of excerpts from the report, starting with these sections on the medical and food emergency.

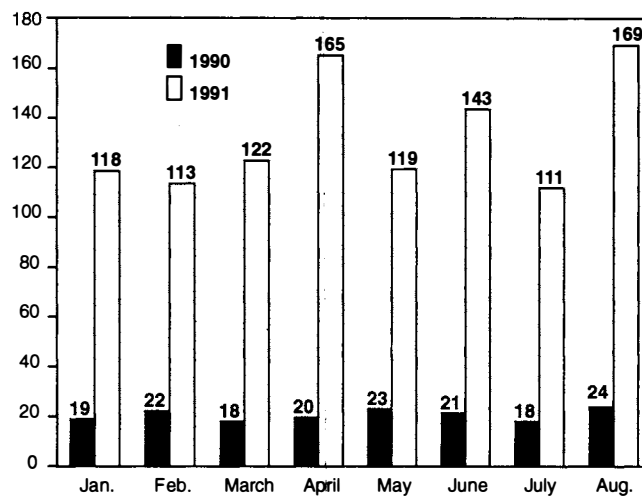
## Health facility survey

The study team included five health professionals (three medical doctors and two public health specialists), who visited 29 hospitals and 17 community health centers located in nearly all governorates of Iraq. At each hospital, they conducted ward prevalence studies of admitted patients, interviewed facility directors, department heads, and physicians, and analyzed medical and hospital records of malnutrition and disease. The ward-based analysis concentrated on patients under the age of five.

Mortality for patients under five years of age varied dramatically throughout the country. For example, at Babel Pediatric Hospital, it has increased 3.9 times for the first seven months of 1991, while at Diwaniya, an increase of 1.2-fold was documented (see **Figure 1**). The incidence of diseases was similarly uneven. With the improvement of Baghdad's water supply, the risk of communicable diseases in Baghdad has substantially diminished in recent months, while in southern Iraq the morbidity pattern is substantially more acute and remains at epidemic or near-epidemic levels.

Within hospitals, infant and child malnutrition is clearly the most significant problem documented by the health facility team. Among in-patients at Erbil Pediatric Hospital, the prevalence of malnutrition, as an admitting diagnosis, was 71%; at Sulaymaniyah, 66%; at Mosul, 66%; and at Ramadi Pediatric Hospital, 61%. Food shortages and frequent gastroenteritis appear to have contributed to a very high level of malnutrition. This is reflected in the large increase in low-birth-weight babies. As an example, in Kut, low-birth-weight babies represent 30-50% of all live births compared

FIGURE 1  
**Reported in-hospital deaths due to chronic illnesses (all ages)**  
**Babel Governorate**  
(number of deaths)



Source: Ministry of Health, Babel

to 12-14% in 1990. The cost of infant formula on the open market has increased 2,000-3,000% since August 1990.

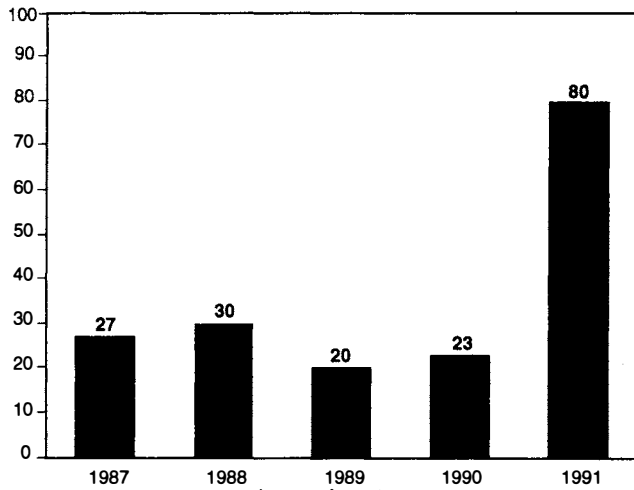
In addition, water-borne diseases, including typhoid, gastroenteritis, and cholera are epidemic. Hepatitis has increased throughout Iraq and by as much as 100-fold in some areas. Meningitis is now widespread in southern Iraq. With the damage to child vaccination programs, such preventable diseases as measles and polio are also resurgent.

Strained health facilities operate at only a fraction of pre-crisis levels. Most lack even basic medical supplies such as vaccines, antibiotics, anesthetics, and syringes. Medicines are in extremely short supply. As a result, infectious diseases go untreated. There is little or no chloramphenicol for typhoid, fluids for rehydration of those suffering from cholera or gastroenteritis, or antibiotics for meningitis. Lack of vaccines and poor sanitary conditions have resulted in outbreaks of previously uncommon and preventable childhood disease, such as polio, measles, and tetanus.

FIGURE 2

### National infant mortality rate

(Children under 1 year of age; deaths per 1,000 live births)



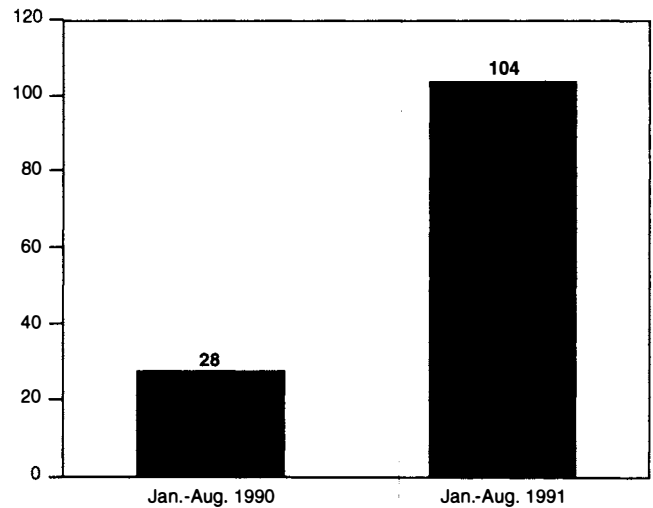
Infant mortality rate has more than tripled (3.3 times) during January-August 1991.

Source: Iraq Household Survey, 1991

FIGURE 3

### National under-five mortality

(Children under 5 years of age; deaths per 1,000 live births)



Under-five mortality rate has nearly quadrupled (3.8 times) during January-August 1991.

Source: Iraq Household Survey, 1991

Drugs for chronic disease are also unavailable. The rate of coronary attacks has increased substantially because patients with heart disease are unable to obtain anti-angina medication. Teenage diabetics are dying because they cannot obtain insulin. Children with treatable leukemia are dying because anti-cancer drugs are largely non-existent. Laboratories, X-ray units, neonatal units, and operation theaters either do not function or provide only limited services.

Due to lack of water and detergent, sanitation was poor in nearly every hospital visited. The supply of water to most hospitals and health centers is sporadic. In a bacteriological survey conducted in southern Iraq, 30% of hospital water sources were grossly polluted with coliform, indicating fecal contamination. In Kurdish areas, tested water supplies of hospitals found heavy coliform pollution. Moreover, the water that is supplied is often contaminated with fecal matter. Lavatories are clogged. At several hospitals, raw sewage had backed up into the wards.

### Child mortality and nutrition survey

Infant and child mortality and nutrition were assessed by conducting surveys in 9,034 households in every region of Iraq. The households were chosen on the basis of stratified random sampling techniques. The household survey was conducted by a team of 32 mostly female Arabic-speakers under the supervision of 10 public health specialists. Within each household, mothers were questioned about the number of children born, the date of birth, whether the children were still alive, and, if deceased, the date of death. This is the standard method for obtaining accurate data on infant and

child mortality.

Based on these interviews, it is estimated that the mortality rate of children under five years of age is 380% greater today than before the onset of the Gulf crisis.

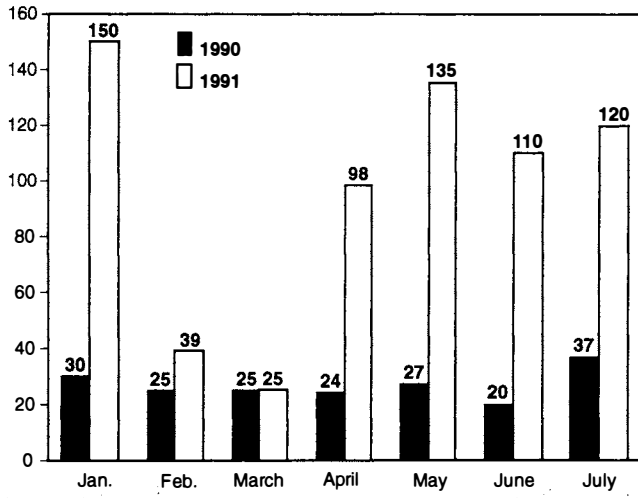
The practice of public health specialists is to state infant and child mortality as a proportion of live births. Before the Gulf crisis, the mortality rate for children under five years of age was 27.8 deaths per thousand live births. Since the Gulf crisis, the under-five mortality rate has increased to 104.4 deaths per thousand live births (Figure 2). Furthermore, it is estimated that the mortality rate of children under one year of age (the infant mortality rate) is 350% greater than before the onset of the Gulf crisis. During January to August 1990, before the Gulf crisis, the infant mortality rate was 22.7 deaths per thousand live births. Since the Gulf crisis, the infant mortality rate has increased to 80.0 deaths per thousand live births (Figure 3).

The rise in infant and under-five mortality is likely due to a complex interaction of factors. There are acute shortages of food and essential medicines throughout Iraq. Lack of clean drinking water and poor sanitation have greatly increased water-borne diseases, such as cholera, typhoid, dysentery, and gastroenteritis. A random sample of 2,902 children registered during the course of the household survey were also measured for their height and weight. These figures were combined with the children's ages in order to estimate the incidence of malnutrition among infants and children in Iraq. Nutritional status was assessed by looking at three different criteria: 1) height for age; 2) weight for age; and

FIGURE 4

**Reported in-hospital incidence of malnutrition in children under five Babel Pediatric Hospital**

(number of cases)



Source: Babel Pediatric Hospital

3) weight for height. According to internationally accepted practice, children were classified as malnourished if they fell two or more standard deviations below the median reference values of the World Health Organization (Figure 4).

Nearly 29% of the children assessed were malnourished under one or more of these criteria. According to the World Health Organization, there are a total of 3.3 million children under five years of age in Iraq. Applying the 29% figure to this total number leads us to estimate that over 900,000 Iraqi children are malnourished.

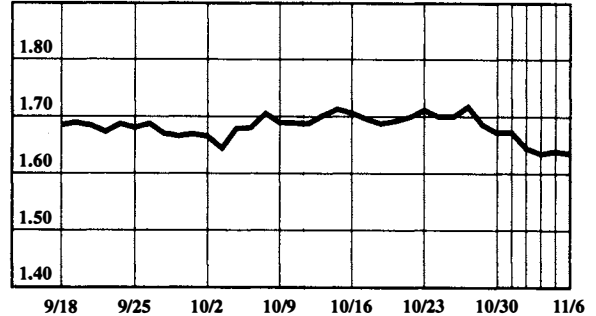
The third criterion used to assess child malnutrition, weight for height, is a measure of severe food deprivation or deficient utilization. In a layperson's terms, a child who falls two or more standard deviations below the median value for weight for height is moderately or severely malnourished, with a significantly increased risk of dying. About 3.6% of Iraqi children assessed were malnourished under this criterion. Applying this 3.6% figure to Iraq's total population of children under five leads us to estimate that 118,000 children are either moderately or severely malnourished and therefore at increased risk of dying.

The incidence of severe malnutrition appears greatest among children between one and two years of age (Figure 4). For example, 5.3% of these children measure two standard deviations or more below the median value for weight for height and therefore, are considered moderately or severely malnourished and at extreme risk. Moreover, over one-third of children of this age are malnourished according to one or more of the three criteria.

**Currency Rates**

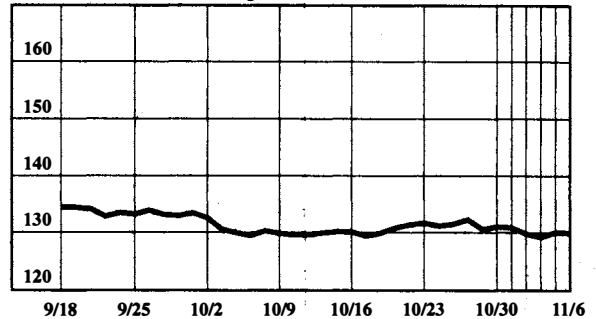
**The dollar in deutschemarks**

New York late afternoon fixing



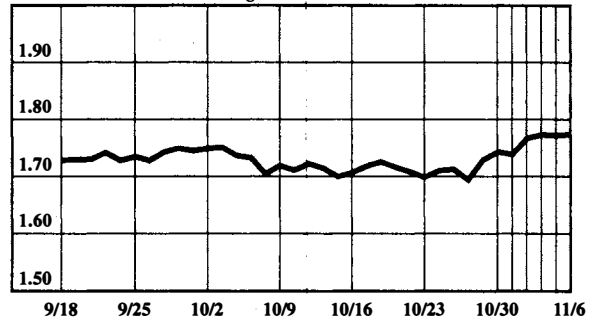
**The dollar in yen**

New York late afternoon fixing



**The British pound in dollars**

New York late afternoon fixing



**The dollar in Swiss francs**

New York late afternoon fixing

