

number of official investigations. These brought to light much of the inefficiency and red tape and the general inability of the agency to respond rapidly to community needs. All of the commissions recommended an immediate reorganization of the municipal hospital system. The Health and Hospitals Corporation is the result.

The 18 municipal hospitals have 16,000 beds, an annual average of more than 4.7 million in-patient days and 2.9 million out-patient visits. The corporation will be one of the major employers in New York City and, with health care one of the fastest growing industries in the country, its role in the city should expand rapidly over the next few years.

To keep pace with this growth, the corporation is empowered to issue bonds, buy equipment and to bypass civil service regulations in hiring personnel. While capital investment will be tightly controlled by the city budget, the corporation will not be required to go through the Department of Public Works for construction and repairs as is presently the case. Nor will it have to use the central purchasing agency unless it wishes. In the past it has taken an average of 88 days to complete purchase requisitions and usually nine months for a hospital to hire new personnel. The corporation will delegate much greater authority to individual hospital administrators, allowing each to hire his own personnel and to spend a certain amount of money without consulting the corporation.

Advocates of the corporation feel that the elaborate system of checks and balances built into the corporation, combined with an influential and knowledgeable board of directors chosen by the city and serving five-year staggered terms, will insure that the corporation continues to be responsive and responsible to the city's health care needs. Mr Derzon claims that the board is anxious to be innovative in preventive medicine by establishing closer ties between the clinics and the hospitals, and that it hopes significantly to involve consumers. "Under the law, consumer advisory boards representative of the community are to be set up at every hospital." He recognizes, however, that the growth and development of hospitals will become political questions.

In spite of the controversy about the corporation, the prime consideration facing the corporation is whether or not it can provide the services the city needs now and in the future. However well it has been organized, its success or failure will depend on the calibre of the administrators who are running it. This is a familiar and daunting problem in the city. Many of the top members of the present hospital department have left or are leaving. Dr English will have a difficult time replacing them.

## EARTHQUAKES

### Death Toll in Peru

from our Geomagnetism Correspondent

THE recent earthquake in Peru (*Nature*, 226, 1087; 1970) will no doubt give geologists and geophysicists added incentive—and data—in their attempts to predict and modify such events. Only time will tell whether these efforts will succeed, but meanwhile other things can be done to reduce injuries and loss of life. The number of people killed and injured in an

earthquake depends on nature's variables—the magnitude and position of the earthquake—but it also depends on man's follies and limitations. In the Peru earthquake, as it turns out, about two thirds of the estimated 50,000 deaths were caused by the collapse of structures—mainly adobe dwellings constructed of sun-dried clay and straw materials.

Over the coastal area and in the Huaylas Canyon severe damage and collapse were restricted almost entirely to adobe constructions on unstable alluvial soil. In the hardest hit Huaylas Canyon, where 35,000 people died, about 90 per cent of the buildings are of this type. Concrete and steel structures, on the other hand, survived much better. In Chimbote, a city of 100,000 nearer the coast and the earthquake epicentre where the proportion of adobe dwellings is smaller than in the mountain villages, the proportion of deaths relative to the population at risk was much smaller (2,600).

At present there is certainly no non-collapsible wonder building which will completely eliminate earthquake deaths, and there may never be. Nevertheless the moral to be derived from the Peruvian disaster is quite clear. Construction engineers must find ways of strengthening the typical adobe construction; and new regulations should be made limiting new adobe dwellings to one storey and insisting upon light roofing materials. Ideally, of course, adobe dwellings should be eliminated altogether, but at present this is economically out of the question in Peru, Mrs Richard Nixon's visit notwithstanding.

## TOLBUTAMIDE

### Hazards of Leaks

THE recent furore over the use of tolbutamide to relieve diabetes has revived criticisms—never very far dormant—that the Food and Drug Administration does not take sufficient precautions to prevent the press from first unveiling to the public reports of the results of clinical trials of drug efficacy. Patients have been unnecessarily alarmed, it is alleged, by reading about the possible harmful side effects of drugs even before their doctors have been informed.

Tolbutamide is a sulphonurea drug which is given orally to treat patients with maturity onset diabetes. It was approved for use in 1957; as a result of a general review of drug efficacy, the FDA revised the labelling of the drug in 1968 to indicate that its principal value was for patients whose condition could not be controlled by diet alone. The use of other sulphonurea drugs was explicitly limited to such cases.

Together with other sulphonurea drugs, tolbutamide was reviewed for its efficacy and for its effect on diabetes complications in a clinical programme which started in 1960. The trials compared the effects of various regimes of treatment on patients in whom maturity onset diabetes had recently been diagnosed, but who were not insulin dependent and were expected to live for at least five years after their entry into the study. All patients were placed on a diabetic diet; one group was given a placebo as well; one a fixed amount of tolbutamide, and the remaining two were treated with insulin.

Two conclusions emerged from the report of the trials, received by the FDA this year. Tolbutamide