PUBLIC SAFETY

Bomb Proof Building

First structure in Washington built to withstand atom bomb blasts will open in September. Its narrowest parts face the probable blast area.

➤ THE FIRST "atomic bomb proofed" building in the nation's capital will open for business on or about Sept 15. The building is the new Armed Forces pathological building at Walter Reed Army Medical Center.

Strictly speaking, the building should be called "blast resistant," not "atomic bomb proofed." The main portion of it is enclosed by steel reinforced concrete walls made to "roll with the punch" of the blast wave, giving rather than breaking as the wave strikes.

The building is located on its site so that the narrowest parts, with least wall area, face the center of Washington, which presumably would be the area from which the blast would come in case of an atomic attack on the nation's capital.

For further protection, there are no windows in the main part of the five stories that are above ground. The building extends three stories underground. The only windows are in the two small four-story wings at the north and south ends of the building. These wings will house administrative offices and are considered expendable.

A closed circuit color television hook-up and a pneumatic tube carrier system, like the change and cash carriers in department stores, will run between the new pathology building and the operating rooms in Walter Reed Army Hospital. This will speed diagnosis for future patients.

The pathologist will be able to see the tissues as the surgeon operates and, over a two-way communication system, can tell the surgeon just where to remove a bit of tissue for microscopic examination in suspected cancer cases, for example. The bit of tissue will be tubed to the pathology laboratory and examined. The pathologist can then tell the surgeon whether or not cancer is present. It is hoped that the television camera can be focused on the microscope so that the surgeon in the operating room can see the cancer cells on his TV screen as the pathologist sees them under the microscope.

The laboratories in the new building are designed on the module plan, that is, in units with a central service core. For greater flexibility and adaptation to various uses, the partitions are of movable steel and the laboratory furniture has plumbing and other fixtures built right into it so it can be moved without leaving holes in the floors.

The electric power supply will come in dual feeders from the city service, with an accessory generator that "kicks on" automatically if either of the two feeder supplies fails.

Light and colors, from pastel to bright shades, varying from floor to floor are used to offset the physiological and psychological effect of the lack of windows in the main building.

A tunnel connects the hospital to the building, entering the pathlogy building near the autopsy section.

Classroom, a small auditorium and a canteen or cafeteria are provided in addition to the diagnostic and research laboratories.

Edgar S. Vasquez, resident engineer for the Corps of Engineers, conducted the Washington Society of Engineers on a tour of the capital city's first atomic blast resistant building.

Science News Letter, June 5, 1954

Questions

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GENERAL SCIENCE—How is the draft affecting training of scientists? p. 365.

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GEOLOGY—How can the Colorado Plateau now be mapped for uranium ores? p. 361.

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MEDICINE

Bigger Fight Against TB

➤ A BATTLE call for a stepped up fight against tuberculosis was issued at the meeting of the National Tuberculosis Association in Atlantic City.

From a fourth to a third of the U. S. population is harboring tuberculosis germs, Dr. J. Arthur Myers of the University of Minnesota Medical School declared. Both he and Dr. Philip E. Sartwell, of the Johns Hopkins University School of Hygiene and Public Health, Baltimore, pointed out that the decline in tuberculosis cases has not kept pace with the decline in deaths from the disease.

The death rate has been forced down from 188 per 100,000 population in 1904, when the NTA was founded, to an estimated 13 per 100,000 in 1953. However, the number of active cases in this country is estimated at 400,000, and the disease is attacking approximately 110,000 persons a year.

Improvement in treatment, especially the new anti-TB drugs, probably is the reason for the decline in deaths, Dr. Sartwell said. More people recover from tuberculosis today. But, Dr. Myers pointed out, the third to fourth of the population harboring TB germs today will be tomorrow's patients who are not only sick but a source of infection to others.

He urged wider use of the tuberculin skin test to find the infected persons before the disease develops.

Earlier, the tuberculosis fighters heard Dr. Harley Williams of London, England, call tuberculosis "probably the most important tropical disease today." The problem, he said, is greatest East of Suez, where the death rate may be 500 per 100,000 population. He urged Western nations to share their expert knowledge of preventive medicine with the rest of the world.

"In dealing with countries where tuberculosis control is hardly begun, we have to realize that we are taking a decisive step," he said. "We are not only showing the way to conquer this disease, we are handing on the tradition of Western medicine. That tradition is based on the value of the human person as an individual. That value is a just one and has to be preserved. Such is the task of medical statesmanship."

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