

## PUBLIC HEALTH

# Radiation Danger Grows

► MAN MAY be in more danger from atomic radiation than was thought a year ago, Dr. H. Bentley Glass of Johns Hopkins University, Baltimore, suggested to members of the National Academy of Sciences meeting in Washington.

Last year the genetics committee of the National Academy of Sciences set the safe radiation exposure to the reproductive organs as 10 roentgens over a 30-year period, he said. A roentgen is an international measure of radiation.

This was set on the assumption the 10-roentgen figure was much lower than the so-called doubling dose, but within the past year there have been indications the doubling dose may be down as low as three roentgens instead of up around 30 or 40, he said.

The doubling dose is that amount of radiation which will cause twice as many harm-

ful genetic changes in man as occur spontaneously. At the present time, spontaneous mutations in man's heredity occur in an estimated two percent of all births, Dr. Glass explained.

Much of the increased exposure is due to enlarged estimates of medical and dental background radiation. Further studies are needed to make the increased estimates more accurate, he said, but researchers in Sweden also report about the same amount of background dose from medical radiation.

Last year's estimates on the amount of fallout radiation are still good and only amount to one-tenth to two-tenths of a roentgen over a 30-year period. This is about the same as that from a watch with a radium-treated dial.

Other members of the symposium on the genetic effects of radiation debated the thorny problem of whether or not rats are

men, as far as radiation experimentation goes.

The life span of rats whose parents were irradiated with neutrons, which have possibly twice the effect of X-rays or gamma rays, was shorter than that of their non-irradiated brothers, Dr. W. L. Russell, Oak Ridge National Observatory, Oak Ridge, Tenn., reported.

Six-tenths of a day was taken off their life span with every roentgen of radiation exposure, and if this relationship is extended to humans, it would amount to shortening man's life span by 20 days per roentgen, he said.

But man is not an overgrown experimental fly or an overgrown mouse, Dr. Th. Dobzhansky of Columbia University, New York, told the geneticists.

We should not ignore the obvious similarities between species but, at the same time, the full answer to the problems of radiation hazard will be found only by studies which include its effects on mankind, Dr. Dobzhansky emphasized.

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## PSYCHOLOGY

## Men, the "Weaker Sex," Should Cry More to Live

► MEN, the "weaker sex," may have to start crying if they want to live longer, Dr. James O. Bond of the Florida State Board of Health told chemists at the American Chemical Society meeting in Miami.

Pointing to the fact that since the turn of this century women have been outliving men, Dr. Bond said, "life insurance statisticians, public health physicians, widows and magazine writers have, over the past several years, become successively aware of the fact that men are less durable, and perhaps more fragile, than women in our modern society."

Heart disease, accidents, suicide and tuberculosis are the big killers of men, Dr. Bond reported, but added that in all the 64 leading causes of death, male rates are higher than female with only nine exceptions.

Pointing his finger directly at undue stress, Dr. Bond said, "Men perhaps need to learn more from women either how to avoid emotional tension, or deal with it in less damaging ways than development of coronary artery disease."

One of the ways, he suggested, is for men to cry more or find a substitute for tears.

No single explanation for why man suffers more than woman will do. What is needed, Dr. Bond said, is further research.

"Fundamental to this research," Dr. Bond reported, "is an awareness by men that their badge of masculinity, their musculature, is no longer an advantage in the competition for survival in today's world. Indeed, it may even be a handicap due to the psychological role it forces men to play in a world that no longer accommodates that role."

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**ENGLISH COMPUTERS**—Foreign computers, like these English electronic digital computers, are competing with American machines in the international market. The photograph shows computers coming off the assembly line in a Ferranti plant at West Gorton, Manchester.

## PUBLIC HEALTH

## Study Effects of Climate On Multiple Sclerosis

► THE EFFECTS of climate, geographical area and other allied environmental factors on multiple sclerosis, medicine's mystery disease, will be studied by three large research organizations, the Veterans Administration reported.

About 100,000 Americans are now suffering from this disease which destroys the nerves and brings on increasing weakness and inability to coordinate body movements. There is no known cure or effective treatment for it.

The more than 2,000 members of the armed forces and veterans who have developed the disease during and since World War II will be the object of studies by the VA, the National Research Council, Washington, and the National Institute of Neurological Disease and Blindness, National Institutes of Health, Bethesda, Md.

The main reason for the study is to learn in what latitudes, climates and geographic areas these victims have lived.

The disease is known to be more prevalent in the northern United States and Canada than in the south. The scientists hope to determine whether the veterans moving to warmer climates have benefited.

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