MEDICINE

Cancer Increase Expected

Loss of young men from war casualties will cause a relative increase in age groups susceptible to cancer. Rationing of physicians is predicted.

A RELATIVE increase in cancer death rates and rationing of doctors for civilians may be expected as results of the war, Dr. Samuel Binkley, medical director of the American Society for the Control of Cancer, declared at the national training school for officers of the Women's Field Army of the Society.

The increase in cancer death rates will be misleading, Dr. Binkley warned, unless the age distribution of the population is considered. The loss of young males from war casualties will cause a relative increase in the cancer age group of the general population.

On rationing of doctors for civilians, Dr. Binkley told the WFA that "if the public will look into the future it can help its Government win this war by participating in voluntary health programs.

"Should rationing of physicians become necessary, people may be asked to



NON-TERRIFYING — Making gas mask wearers look like human beings is the novel idea back of this invention patented by Charles W. Leguillon of the B. F. Goodrich Company. It is made from transparent plastic materials and is impervious to noxious gases, dust and vapors. It also has a design feature that prevents eye lenses from fogging.

take their medical problems to a centralized hospital in a community where the remaining local physicians can pool their resources, budget their time and quickly sift serious sickness from simple ailments not entitled to consideration during a war emergency," he said.

"Young mothers are becoming more self-reliant," he continued. "The automatic services of skilled pediatricians cannot be expected in every community during the war. In some communities experienced mothers are already teaching the fundamentals of infant feeding to their daughters and friends who have suddenly lost their physicians to the service.

"A reduction in unnecessary sickness and a better understanding of health will reduce the strain on those physicians who must remain at home. Home accidents due to carelessness and common colds from exposure due to lack of proper clothing at football games are examples of unnecessary demands upon doctors during a war emergency."

Science News Letter, October 3, 1942

Worse Foe to Japs

MEMBERS of the WFA attending their first national officers training school got a lesson on how to fight stomach cancer and learned that this highly fatal disease attacks Japs two or three times as often as white races.

Teacher of this class for officers of the Women's Field Army of the American Society for the Control of Cancer was Dr. George T. Pack, attending surgeon Memorial Hospital, New York.

"Cancer of the stomach occurs two or three times as frequently in the Japanese as it does in the white races, a phenomenon not entirely understood, but highly approved of, at this time," he stated.

The stomach is the most common region of the body for fatal cancer to be located, he said.

The "flagrancy of high pressure salesmanship through the radio and the press by manufacturers of proprietary drugs in order to induce the public to treat its own indigestion" is one of four causes for the high mortality from stomach cancer listed by Dr. Pack.

The other three are the natural high and increasing incidence of this disease; the progress of these cancers to the stage of inoperability before the majority of them are correctly diagnosed; and the difficulties attending surgical removal of cancer in this organ.

In two-thirds of the cases the patients are to blame for "immoderate and fatal delay" in getting a correct diagnosis and early, appropriate treatment. In the other third, Dr. Pack said, it is the fault of the physician first consulted.

On the encouraging side, Dr. Pack pointed out that many cancers of the stomach, formerly considered inoperable and hopeless, are now successfully removed. He reported that in the last two years 16 patients at Memorial Hospital have had the entire stomach removed because of cancer. In this operation, the small intestine is stitched to the esophagus or gullet, and serves as a substitute stomach, enabling the patient to eat normal meals. In most patients, removal of part of the stomach is all that is necessary.

Science News Letter, October 3, 1942

PHYSICS

One Good Physicist Per Year Per Million Is Bred

➤ ONE GOOD physicist is bred per year per million inhabitants.

This estimate, made by Sir Lawrence Bragg, of Cavendish Laboratory, Cambridge, England, was based on the number of physicists turned out annually by the British universities and is confirmed by the Central Register of the Royal Society, which corresponds to our National Roster (*Nature*, July 18). At the beginning of the war, the British had listed 1,200 physicists in a population of 45,000,000. Assuming an average working life of 30 years, this comes also to about one per million per year.

A survey made in the United States in connection with the National Roster of Scientific and Specialized Personnel shows that one good physicist in a million men applies to the U. S. A., too.

This ranks the physicist among the scarcest of war "materials." The demand in both England and America exceeds the supply, and the universities have been pressed to train as many men as possible to fill the gap.

The physicist, like the poet, is born and not made, an editorial in the London journal *Nature* contends. He

cannot be made on demand by any system of training. However, the British editorial argues, Sir Lawrence Bragg's definition of a good physicist as "a man capable of independent thought, with a flair for his subject," has set the standard too high. Many of the tasks for which physicists are required can be very adequately performed by men and women less gifted.

There has been a very substantial increase in the size of the physics classes

in British universities and colleges. While this may not add materially to the numbers of "good physicists" it will add substantially to the numbers available for the more routine but no less important posts for which originality of a high order is not necessary. And this will enable the strictly limited number of men with a real flair for research to be assigned to the tasks which they alone can do.

Science News Letter, October 3, 1942

EDUCATION

Victory Corps Planned

Enlistment of 6,500,000 girls and boys in secondary schools for voluntary war service training is announced as a national war policy. No uniforms to be worn.

➤ A U. S. HIGH SCHOOL Victory Corps in every high school, enlisting 6,500,000 girls and boys volunteering for war service training, was announced in Washington as a national war policy.

Resulting from recommendations of the U. S. Office of Education's Wartime Commission, the new plan is being urged upon all secondary schools, private and public, by War Manpower Chairman Paul V. McNutt and Commissioner of Education John W. Studebaker, acting through state school systems.

Accelerated special training of youth for war service is the major objective of the High School Victory Corps. Active participation in the community's war effort is another aim.

There will be activities of the HSVC in classrooms and after school hours

as well in the nation's 28,000 high schools.

These are among the projected activities:

Guidance of youth into critical services and occupations.

Wartime citizenship training to insure better understanding of the war, its meaning, progress and problems.

Physical fitness.

Voluntary military drill for selected boys.

Competence in science and mathematics.

Pre-flight training in aeronautics for those preparing for air service.

Pre-induction training for critical occupations.

Community service including training for essential civilian activities.

"The high school can't go on doing

business as usual," said the Policy Commission's recommendations that brought forth this new plan for high school education. "High School youth are impelled by patriotic considerations to point their training to preparation for war work, to tasks requiring skill of hand and strength of body, coupled with intelligence and devotion."

Every student who will complete high school within two years will have the opportunity of enrolling in one of five divisions: Land Service, Air Service, Sea Service, Production Service, and Community Service.

Special insignia will be worn by the HSVC and each of its divisions. In general, uniforms will not be worn but there will be a special cap of overseas type that may be made at home.

The basic idea of the Victory Corps is the cutting down of the time needed to train men and women after they have enrolled in the armed forces and in war industries. Special pre-induction courses prepared in cooperation with the War Department will bulk large in America's new educational program.

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ASTRONOMY

Mexican Postage Stamps Have Astronomical Theme

By DR. HARLOW SHAPLEY, Director, Harvard College Observatory

A LIMITED ISSUE of postage stamps portraying astronomical features was issued by Mexico in connection with the dedication of that nation's new astrophysical observatory at Tonanzintla in the State of Puebla this year.

Shown at the extreme left, in the illustration on this page, is the 2-centavo stamp. The dark nebulous cloud be-

