

CANCER

WHO
WHAT
WHEN
WHERE ?

Cancer, one of history's oldest diseases, is found throughout the world today, in all forms of life, in all cultures and races of man. Its cause—or causes—still unknown, the most challenging mystery ever to confront medical science, cancer can strike anyone, anywhere, at any age. It now ranks second as the cause of death and its toll is still rising. In 1900 there were 41,000 deaths in America from cancer; by 1959 the figure had risen to a quarter of a million.

The growing number of cancer deaths in the United States is related in part, of course, to the increase in our population, with its larger proportion of senior citizens. Since the dramatic conquests of medical science in other areas of disease, increasing numbers of Americans now live well past the age of 45, the age when cancer's death rate rises sharply. As more people live longer, cancer rates are higher.

Some forms of cancer, however, are increasing more than others. Lung cancer, for example, shows the most alarming rise. Deaths caused by lung cancer have increased over tenfold in the last thirty years, from 2,571 in 1931 to 39,000 estimated for 1962. On the other, more hopeful side, deaths from cancer of the uterus have not increased in proportion to our great population increase. In fact, the percentage of cures of this once-fatal form of the disease has now risen to 55 per cent.

Cancer strikes one person in every four—few families escape. Early detection and prevention are the best safeguards that modern science can offer; for once the disease has spread in the body, there is no cure. Man, woman, or child, certain ages, and certain areas of your body, are more vulnerable than others. Virtually none is immune, but virtually none is beyond your vigilance.

This booklet will give you the latest information available about what you can do to protect yourself and your family.



WHY IS IT SO IMPORTANT TO DETECT CANCER IN ITS EARLIEST STAGES?

The answer lies in the patterns of growth that are followed by this disease, or rather, these diseases. For cancer is not a single disease but a whole family of them. Cancers can occur anywhere in the human body; they are as different from each other as the body tissues where they appear.

The tissues that make up our bodies are composed of tiny complex units called "cells." Each cell, though it may weigh no more than 1/50,000 of an ounce, is composed of the essential substances of life itself. Growth is the orderly process of normal cell reproduction: one cell divides into two, these two become four, the four eight, and so on. A newborn baby's body consists of over 200 billion cells. As we grow up, the cells continue to multiply by the same orderly process, which comes to an end when we become adults. For the rest of our lives, new cells form only to replace worn-out cells, heal injuries, and keep the body in good repair. Otherwise, they stop multiplying.

Cancer cells, however, multiply in an uncontrolled, disorderly way, producing useless tissue and destroying the normal cells around them. The still-unsolved mysteries of cell chemistry may hold the key to the reason for this abnormal growth. The part played by an important cell chemical called "DNA" is already under intensive investigation. Recent laboratory research with DNA may lead to