FOR RELEASE AT CONCLUSION
OF NEWS CONFERENCE

Statement
by
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During the past two weeks there has been a considerable public discussion about radioactivity and the effects on health caused by the presence of radioactive elements in air, milk, water, and other foods.

Some of the discussion has resulted from the release by the Public Health Service of its reports on radioactivity in milk.

I think it is desirable to emphasize several points.

1. Radiation is not new in our environment, but the problem of radiation in the nuclear age is one that will be with us from now on. These problems can be controlled and minimized.

2. There are many sources of radiation, including cosmic rays, ~~from the sun~~, and natural gases, none of which contribute more than fallout to the total radiation to which the population is exposed.

3. Many scientists are working on the problem of the effects on human beings of repeated small exposures, and additional research is being done by the Public Health Service, the Atomic Energy Commission, and others to ascertain these effects. We have made plans to enable the Food and Drug Administration to expand its work in this area.

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*Released at News Conference, [illegible]

4. Our scientific information at this time is [illegible] to evaluate precisely the long-term health effects [illegible] of radioactivity now contained in water, air, milk, and other food stuffs. [redacted]. Continuing and expanding efforts will be made to put ourselves in a position to make precise evaluations.

5. The Public Health Service has repeatedly emphasized that the amount of radioactivity found in milk as well as in [illegible] limits as established by the National Committee on Radiation Protection and Measurement. These limits are [illegible] benchmarks [illegible]. (Attached is a brief statement about the committee and [illegible] members of its executive committee.)

6. Some of the figures in the milk studies [illegible] stood and need further explanation.

7. The Public Health Service has proposed a [illegible] stepup in its expanding radiological health activities.

You will note in the attached statements that both the Public Health Service and the Food and Drug Administration [illegible] have responsibilities in this area. It is apparent that [illegible] carried on in connection with these responsibilities [illegible] substantially strengthened [redacted] in the [illegible] the health problems which [illegible] increasingly [illegible].

With respect to the hazards of radiation, we are in agreement that according to present theory any radiation may be hazardous to health. The degree of hazard may be great or negligible depending on many factors--strength, duration of the exposure, the part of the body exposed, previous exposure, and so on.

Surgeon General Burney advises me some of the harmful effects that can result from radiation, and about which there is considerable, are genetic mutations, the shortening of the life span, and increased incidence of certain types of cancer, including leukemia.

The Atomic Energy Commission has been conducting studies on a broad basis for five years, including studies of radioactive materials in water, air, and soil as well as human bone and some food studies. Studies which have been undertaken more recently by the Public Health Service supplement some of the studies by the Atomic Energy Commission.

With respect to the Public Health Service's milk sampling and the reports on it, we need to take into account a number of factors.

Milk was chosen for our initial study among the foods for several reasons. One of the radioactive isotopes of most concern is strontium-90, because this element has a much longer life than some isotopes, because in the biochemical processes of the body, some strontium-90 is deposited in the bones, and because strontium is present in milk. Since milk and milk products properly are a part of a large part of our national diet, it is likely that a relatively large portion of the strontium-90 that stays in the body comes from milk or its products.

In addition, of course, milk [illegible] country all year and is thus readily available for [illegible] study.

As published reports of the [illegible], the Public Health Service, and other studies show, strontium-90 and other radioactive elements are also present in wheat, soybeans, water, milk, grass, and in the soil itself.

With respect to possible misunderstandings about the figures contained in the Public Health Service monthly reports on radioactivity in milk, it is important to recognize that they should be considered in relation to other figures. The National Committee on Radiation Protection and Measurement, on the basis of the scientific criteria available to it, has set maximum permissible limits for lifetime exposure of the individual to specific radiation and radioactive materials.

These limits were adapted from safety standards for persons working in close proximity to sources of radiation, such as medical doctors, technicians, The occupational permissible limits were divided by [illegible] permissible limits for the general population.

For strontium-90, for instance, the Committee's current recommendation for a maximum permissible concentration is 90 micromicrocuries per liter of water or milk. This means that on the basis of present knowledge, the average concentration of strontium-90 among all items of the diet--water, meats, vegetables, bread, etc.--should be not more than 90 micromicrocuries per liter (or per kilogram--2.2 pounds) for a lifetime without exceeding the recommended maximum permissible concentration.

(A curie is the amount of any radioactivity in one gram of radium. A micromicrocurie is one millionth of a millionth of a curie.)

Average yearly levels of radioactivity in milk are [illegible] significant than monthly levels because the yearly averages [illegible] accurately comparable with lifetime permissible limits. [illegible] for example, there as an increase in Strontium-90, Kismo [illegible] micromicrocuries in October 1958 to [illegible] in November 1958 [illegible] dropped back to 15.6 in December. The average level for the year ended October 1958 was 11.4 compared with 12.6 as the average rate for the year ended November 1958. This yearly average rate is [illegible] compared with the 80 micromicrocuries currently used as the [illegible] permissible limit rate.

I am advised--and it should be [illegible] this [illegible] permissible limits are only calculated estimates. They [illegible] to change as more and better scientific data are developed [illegible] active elements and their effect on the human body.

For example, I understand that already there have been [illegible] to consider lowering the recommended levels for some elements [illegible] Strontium-90. Further consideration should be given to [illegible] Strontium-90 which is distributed and retained in the body [illegible] deal more research is needed to provide data for a more [illegible] correlation between the amount [illegible] blood stream and [illegible] ment in the body.

For the time being the current maximum permissible [illegible] the most informed scientific opinion available to us.

However, when the total amount of radiation [illegible] exposed is increased, measures should be taken to [illegible]

which we have some control. I [illegible] the public health [illegible] advocate several years ago the [illegible] X-ray [illegible] stores for fitting shoes, and [illegible] years ago [illegible] tests for mass X-ray surveys as the first step in detecting [illegible]

Last September I discussed at a press conference [illegible] activities conducted by the Department in the field of [illegible]

We are now working with the Food and Drug Administration [illegible] determine what can be done to enlarge its capabilities for [illegible] its statutory responsibilities as they relate to the field of [illegible]

With respect to the Public Health Service program, the [illegible] budget for 1960 calls for slightly more than a doubling of [illegible] of the Public Health Service in the field of radiation [illegible] for an appropriation of $1,439,100, an increase of $[illegible], the largest single increase in the Public Health Service. This [illegible] about $2 million being devoted to the study of radiation [illegible] Institutes of Health through grants-in-aid and in its own [illegible] The expanded Public Health Service effort would be [illegible] research, technical assistance to States and communities, and [illegible] personnel.

Dr. Burney advises me that the research will [illegible] the development of better knowledge concerning the effects [illegible] on the human body. To obtain more knowledge in this [illegible] problem, studies will be made in two types of [illegible] exposed to radiation in industry [illegible] medical diagnosis and therapy.

In addition, the research would seek to simplify and standardize tests used to measure those radiation levels which affect health. With such standardized methods, a national system could be developed with the help of State and Territorial public health agencies for collecting and exchanging information on radiation.

Technical assistance to the States and communities would include the assignment of trained Public Health Service personnel to selected State, local, and regional offices. It would also include a survey to identify and assess nationwide radiological health resources. One aspect of this survey would be to identify personnel who might be most readily trained for work in radiological health.

The training activity would cover expansion of the training of a number of professionally trained persons responsible for direction of national and State program activities in radiological health. The experience gained in these training activities would be applicable to the training programs conducted by State and local health agencies.

I feel that these steps are essential to finance programs that, if taken, they can provide fruitful results or which will lead to additional knowledge and measures for health protection against radiation.

It is quite clear that the problem of radiation in our environment is one we must learn to live with. For fact, it has always been with us. It has national and international political ramifications of a most complex nature. As I have indicated, we need, as a first objective, to learn much more than we know now about the whole subject. The role of this Department is to aid in this effort to carry out specific