

The Report also contains similar values with regard to "somatic" or body dose -- in terms of what is called "estimated mean marrow dose". From these, it is evident that the dose contributions from the various sources are in roughly the same proportion whether one considers the "genetic" dose or the "somatic" dose. Data of this kind support the view I expressed recently in Parliament to the effect that radioactive fallout contributes only a small part of the total radiation exposure at the present time.

I again make this statement so as to place radioactive exposure caused by fallout in its proper perspective. We are not trying to ignore or minimize the situation -- as some might appear to believe. The emphasis that is placed on fallout studies in the Department's programme is ample proof that we are not ignoring it. Furthermore, our interpretation of the facts is based on the best scientific advice that we can obtain, and I might say that we are able to obtain the views of the best scientists in Canada and in other countries.

The final section of our measurements programme is "special projects". These will include facilities for coping with accidents which might involve high radiation exposures or widespread dispersion of radioactivity. The same facilities will also be available for testing industrial and commercial radiation sources to ensure that they meet acceptable safety standards.

Clinical Studies

You will recall that at the outset I indicated three broad divisions in our radiation protection programme -- administration, physical measurements and clinical studies. I have dealt with the first and second of these and would now like to say something about the third -- clinical studies.

As I mentioned, this is of chief interest to us since it involves the effects of radiation on humans. I would add that it is also the area containing the most uncertainties as we lack adequate knowledge about the fundamental biological effects of the irradiation of man. This is particularly so in the case of chronic, low-level radiation exposure.

It is because of these uncertainties that the matter of maximum permissible exposure to radiation has been approached with great caution. Here, I think it should be noted that those who are concerned with developing guidelines in this area are highly experienced persons who are actively engaged in radiation protection work. They have access to the most up-to-date, fundamental biological knowledge of the effects of irradiation on man. They are fully aware of the uncertainties and have allowed for them in their recommendations. That is