

The BRITISH JOURNAL OF RADIOLOGY

FOUNDED 1896

Vol. XXX

JUNE 1957

No. 354

EDITORIAL

RADIATION HAZARDS IN DIAGNOSTIC RADIOLOGY

THE publication of the M.R.C. Report on *The Hazards to Man of Nuclear and Allied Radiations** has made radiologists set new standards of protection for their patients, as well as for their staffs. Since the gonads can never be completely screened from scattered radiation, the low levels of dosage which are involved in routine diagnostic examinations may accumulate to produce harmful genetic effects, even when the reproductive organs are not in the primary beam. The number of people who are exposed to X rays for diagnostic purposes has increased rapidly in recent years and the genetic hazard to the population as a whole has become commensurately larger. It is estimated in the M.R.C. Report that, averaged over England and Wales, each member of the community of reproductive age receives from this source alone 22 per cent as much again as each individual receives from the natural background of cosmic radiation and environmental radioactivity to which all are continuously exposed; and there are reasons for believing that this estimate is too low.

From time to time attention has been drawn to these hazards in the BRITISH JOURNAL OF RADIOLOGY either in papers or in reports of symposia. We believe that many readers will wish not only to know how great the danger is, but also how to avoid or minimise it. Many radiologists have neither the time nor the facilities to explore the literature beyond their own immediate interests and requirements, and important papers may have been overlooked or merely "skipped". Arrangements have therefore been made with a small group of radiologists and physicists, invited by the Council of the Institute because of their special experience in this field, to prepare a series of short papers, the purpose of which will be firstly, to review the literature and secondly, to state briefly and clearly the simple steps which may be taken in any X-ray department to minimise both skin and gonad doses. In the belief that these papers will be generally welcomed the Editors will give them all possible priority.

An obligation rests on radiologists everywhere and we commend to their notice the U.N.O. statement on *The Responsibilities of the Medical Profession in the Use of X rays and other Ionizing Radiation* and a note from Lord Adrian on the work of the Committee on Radiological Hazards to Patients which are printed immediately following this Editorial.

* Cmd. 9780. H.M. Stationery Office, London, 1956. Price 5s. 6d.