

APPENDIX

INJURIES KNOWN TO HAVE OCCURRED FROM OVER-EXPOSURE
TO UNCONTROLLED IONISING RADIATION IN MAN.

Note:- * indicates that the effect arises more commonly from internal over-deposition of short-range particle emitting substances.

<u>SKIN</u>	<u>Single exposures.</u>	Redness, blistering, baldness, ulceration, scarring, cancer.
	<u>Repeated exposures.</u>	Redness, skin thinning, baldness, pigmentation, over-thickening, ulceration, cancer formation.
<u>EYES</u>		Lens opacities (cataracts); eye surface burns.
<u>BONE</u>	<u>Bone cells proper.</u>	* Inflammation; cell death; bone cancer (sarcoma).
	<u>Bone marrow cells. (blood-forming)</u>	* Reduction of white cells or red cells in circulation. Failure to form new blood. Cancer or malignant overgrowth of blood.
<u>LUNGS</u>	<u>Lungs and Bronchi.</u>	* Fibrosis of lung; cancer of bronchial cells or lung.
<u>GENITALS</u>	<u>Reproductive cells.</u>	Temporary or permanent sterility or reduced fertility. Hereditary changes in later generations due to chromosome and gene changes (in animals, not yet seen in man).
<u>OTHER ORGANS</u>	<u>Thyroid, Liver, Intestine, etc.</u>	* Cell scarring; loss of function; cell death; malignant (cancerous) changes.
	<u>Lymphoid tissues.</u>	Reduction of lymphoid cells in blood. Overgrowth of lymph tissues in lymph glands. Cancer of lymph glands.
	<u>General tissues.</u>	Premature ageing.
<u>ATOMIC BOMB INJURIES</u>	<u>Single rapid very high over-exposure.</u>	Radiation skin burns. Acute radiation vomiting and sickness. Haemorrhages and anaemia. Sterility or miscarriages. Prolonged wasting and death.