

RADIATION EFFECTS

Measurements in millisieverts (mSv). Exposure is cumulative.

- **Potentially fatal radiation sickness.**
Much higher risk of cancer later in life.

10,000 mSv: Fatal within days.

5,000 mSv: Would kill half of those exposed within one month.

2,000 mSv: Acute radiation sickness.

- **No immediate symptoms. Increased risk of serious illness later in life.**

1,000 mSv: 5% higher chance of cancer.

400 mSv: Highest hourly radiation recorded at Fukushima .
Four hour exposure would cause radiation sickness.

100 mSv: Level at which higher risk of cancer is first noticeable

- **No symptoms. No detectable increased risk of cancer.**

20 mSv: Yearly limit for nuclear workers.

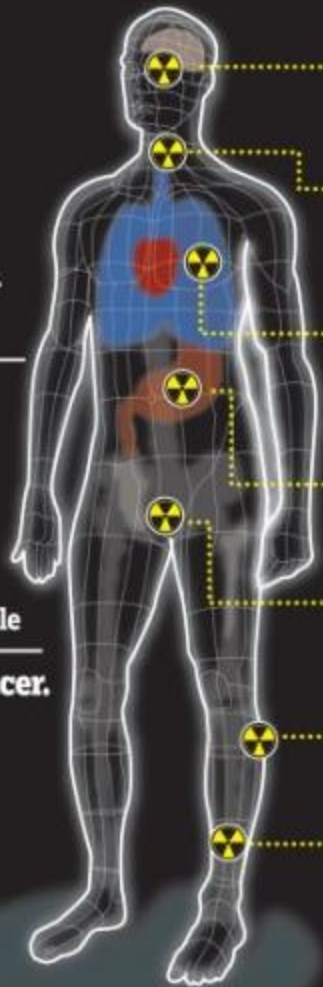
10 mSv: Average dose from a full body CT scan

9 mSv: Yearly dose for airline crews.

3 mSv: Single mammogram

2 mSv: Average yearly background radiation dose in UK

0.1 mSv: Single chest x-ray



EYES High doses can trigger cataracts months later.

THYROID Hormone glands vulnerable to cancer. Radioactive iodine builds up in thyroid. Children most at risk.

LUNGS Vulnerable to DNA damage when radioactive material is breathed in.

STOMACH Vulnerable if radioactive material is swallowed.

REPRODUCTIVE ORGANS
High doses can cause sterility.

SKIN High doses cause redness and burning.

BONE MARROW Produces red and white blood cells. Radiation can lead to leukaemia and other immune system diseases.