

## Rössing Uranium

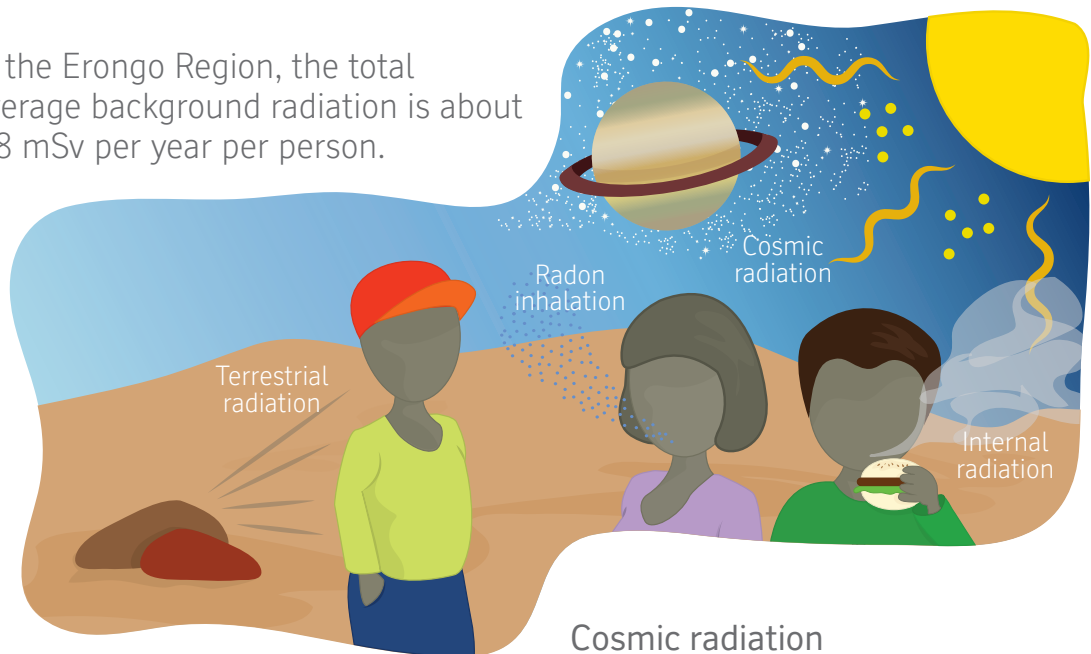
Working for Namibia

### WHAT IS BACKGROUND RADIATION?

There are many sources of naturally occurring ionising radiation in the environment. We say these sources contribute to **natural background radiation**.

The milli-sievert, mSv, is a unit for measuring biological risk arising from ionising radiation.

In the Erongo Region, the total average background radiation is about 1.8 mSv per year per person.



Sources of natural background radiation

#### Internal radiation

comes from the things you eat and drink, the dust you inhale, and the radioactivity in your blood and bones.

On average, the annual internal radiation dose from ingestion and inhalation of particulate matter is about 0.3 mSv per person.

#### Cosmic radiation

is made up of highly energetic particles and electromagnetic waves from the sun and from interstellar space. The earth's atmosphere and its magnetic field shield us from cosmic radiation.

In the Erongo Region, the average annual radiation dose from cosmic radiation is about 0.3 mSv per person.

#### Radon

is a radioactive gas that is emitted from rocks and soils and occurs everywhere in air.

In the Erongo Region, the annual dose from the inhalation of radon decay products is about 0.5 mSv per person.

#### Terrestrial radiation

comes from the rocks and the soil around you.

In the Erongo Region, the annual dose from terrestrial radiation is about 0.6 mSv per person.