

Rössing Uranium

Working for Namibia

WHAT ARE RADIATION EXPOSURE PATHWAYS?

Some radiation types have sufficiently high energy to damage living cells.

We refer to this type of radiation as ionising radiation because it can knock electrons out of atoms.

How can we be exposed to ionising radiation?



Exposure pathway:

The way a person can be exposed to ionising radiation.

There are four different exposure pathways:

1. External (from outside our bodies): Exposure to **gamma rays in our environment** – at the mine this could include radiation from uranium ore, drums containing radioactive materials, radioactive deposits (scales) on pipes etc.



2. Internal (inside our bodies):
Inhalation: breathing in dust or fumes that are radioactive (including cigarette smoke).



3. Internal:
Inhalation: breathing in radon decay progeny (radioactive decay products of radon gas).



4. Internal:
Ingestion: consuming radionuclides which are in or on our food or drink.

