# Toolbox Talk 58. Radiation (Ionising)



## What?

- Ionising radiation occurs as either electromagnetic rays (such as X-rays and gamma rays) or particles (such as alpha and beta particles)
- It occurs naturally (e.g. from the radioactive decay of natural radioactive substances such as radon gas and its products) but can also be produced artificially
- Tissue in the human body can be damaged by ionising radiation in a unique manner

### Why?

- Everyone receives some exposure to natural background radiation and much of the population also has the occasional medical or dental X-ray, with the most common forms of ionising radiation being alpha and beta particles, or gamma and X-rays
- Welding, cutting, and brazing operations can produce health hazards including exposure to metal fumes and to ultraviolet (UV) radiation
- Too much time in the sun can also have serious effects by increasing the risk of skin cancer and therefore people working outside should cover up and wear barrier cream to block the sun's damaging rays

#### Do

- ✓ Wear suitable PPE
- Erect screens to protect against UV radiation when welding
- ✓ Undertake a risk assessment
- Use skin protection and cover up when working outdoors in the summer
- ✓ Follow the rules when working in areas where there is ionising radiation

## Don't

- ✗ Forget to wear the correct PPE
- Expose unprotected skin when working outside during the summer

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