

Questions and answers

Q What is radiation?

Just as heat and light transfer energy from the sun to the earth, nuclear radiation transfers energy from a source to an absorbing medium. The source of nuclear radiation may be radioactive atoms or equipment such as x-ray machines. It can be in the form of a particle (such as an alpha or beta particle) or in the form of an electromagnetic wave (such as gamma or x-rays.)

Unlike visible light or heat, nuclear radiation cannot be detected by the human senses. Radio and television waves are also electromagnetic in nature and cannot be detected by the human senses either. Nuclear radiation differs from light and other types of radiation in that it has sufficient energy to cause damage to cells in the human body.

Q Why in an emergency are we advised to go indoors and close windows/ventilation systems?

If a nuclear emergency was to occur, it is possible that radioactive material could be discharged to the environment as an airborne cloud of dust. If you are outside when this cloud is passing, you may possibly breathe in the dust and be exposed to the direct radiation from the cloud.

One of the most effective ways of reducing your exposure is to shelter indoors. With the windows and doors closed this protects you from the airborne dust whilst the building fabric reduces your exposure to the direct radiation.

Additional information regarding radiation and health effects can be found on the UK Health Security Agency (UKHSA) web site.

Q What do I do if I hear the emergency alarms?

The sounding of alarms are primarily for personnel within the Dounreay / Vulcan boundary. Any emergency affecting the public would be communicated via the emergency services.

Q How often and when do you test the alarms?

Routine tests at Dounreay are carried out on the first working Tuesday of every month at 1100hrs. Routine tests at Vulcan are carried out on the first and third working Tuesday of the month.

Q What about my pets?

Keep domestic pets indoors, where practical they can be evacuated with you.

Q What about farm animals?

Advice will be given by Scottish Government regarding animals. Do not put yourself at risk to tend to animals.

Q Where would we be evacuated to?


You will be advised on where you are being evacuated to.

Q What organisations have been involved in these arrangements?

Highland Council, Police Scotland; NHS Highland; Scottish Fire & Rescue Service; Scottish Ambulance Service; Scottish Environment Protection Agency; Scottish Government; Food Standards Scotland; Office for Nuclear Regulation; Civil Nuclear Constabulary; Defence Nuclear Safety Regulator; UKHSA - Centre for Radiation & Chemical Emergencies; Maritime & Coastguard Agency; Scottish Water; Dounreay; Ministry of Defence (Vulcan NRTE).

Useful information

Communication channels

- **Greatest Hits Radio - North Scotland** (1107AM), **Freeview** - channel 716, **Sky** - channel 0151
 - **BBC Radio Scotland** (92.4FM, 94.7FM, 810MW)
 - **STV** and **BBC TV** (Scotland)
-  **Twitter** - Police Scotland
-  **Facebook** - Police Scotland
- Online:** www.highland.gov.uk
- Tel:** Police Scotland 101

Dounreay and Vulcan NRTE EMERGENCY INFORMATION (for local residents) November 2023



This leaflet has been produced under the requirements of the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR)



Dounreay and Vulcan

The Dounreay and Vulcan Nuclear sites were constructed in the 1950's. Dounreay for the development of the prototype fast reactor research programme and Vulcan for the on shore testing of submarine reactors.

Dounreay is currently being decommissioned; Vulcan NRTE is no longer operational and is preparing for decommissioning. As the nuclear hazards are decreasing, the likelihood and consequences of a nuclear emergency are also reducing.

In the unlikely event of a nuclear emergency, there is a risk of exposure to elevated levels of radioactivity. This information provides advice on initial actions to take to protect yourself and those around you should such a situation occur.

Detailed Emergency Planning Zone



The **Detailed Emergency Planning Zone (DEPZ)** is the defined zone around Dounreay / Vulcan where it is proportionate to pre-define protective actions which would be implemented without delay (eg within a few hours) to mitigate the most likely consequences of a radiation emergency.

The **5km Outline Planning Zone (OPZ)** distance is set in legislation (ie. REPIR 2019) and is an area extending beyond the DEPZ, from a centre point, where protective actions may be required to be implemented by the appropriate agencies. Information for residents in the OPZ can be found at www.highland.gov.uk

Notification

Those affected will be notified through the emergency services; TV/Radio and social media sites which will provide you with information on the actions you should take.

This leaflet is available in other formats on request from the Highland Council

Actions you may need to take

Go indoors

Go indoors and stay there. Close all doors, ventilators and windows. Switch off fans and where possible extinguish open fires, turn off gas, oil or solid fuel central heating.

Communications

Switch on your TV, radio and check any social media sites such as Facebook or Twitter. Information regarding the incident will be broadcast through these channels and will be updated regularly.

Do not phone the sites unless you need urgent help as they will be busy dealing with the emergency.

Evacuate

Should evacuation be necessary you will be advised of the arrangements. You should use your own transport. If you do not have transport an emergency number will be provided that you can call and transport will be arranged. Pack an overnight bag ensuring you take any required medication and any specialised dietary supplies with you.

Ensure your property is safe by switching off power supplies to non-essential electrical apparatus and locking doors and windows. Make your way to the evacuation centres which will be broadcast on local radio, television and social media sites.

Special arrangements will be made for any vulnerable people who have to be moved. Arrangements will also be made to ensure members of your family who were not present when you left home (eg school children) are re-united with you as soon as possible.

End of the emergency

When it is considered safe you will be advised of this and what action to take.

Information concerning the end of the emergency will be broadcast through local radio/TV and social media sites.

If you were evacuated, you will be informed of the arrangements for returning to your home.

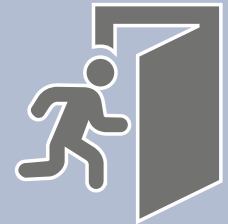
You should follow any advice given to you carefully.



Go indoors



Communications



Evacuate

