

WHAT YOU SHOULD DO IF THERE IS A RADIATION EMERGENCY AT THE DEVONPORT SITE

June 2026



IMPORTANT RADIATION SAFETY ADVICE

You should read this booklet carefully.

The information in this guide is very important. Although the chance of ever having to use this advice in an emergency is extremely unlikely, please put it in a safe place.

The advice is summarised on the back page, which you should tear off and hang on your notice board or by your front door, so you can find it easily.

THESE QUESTIONS WILL BE ANSWERED:

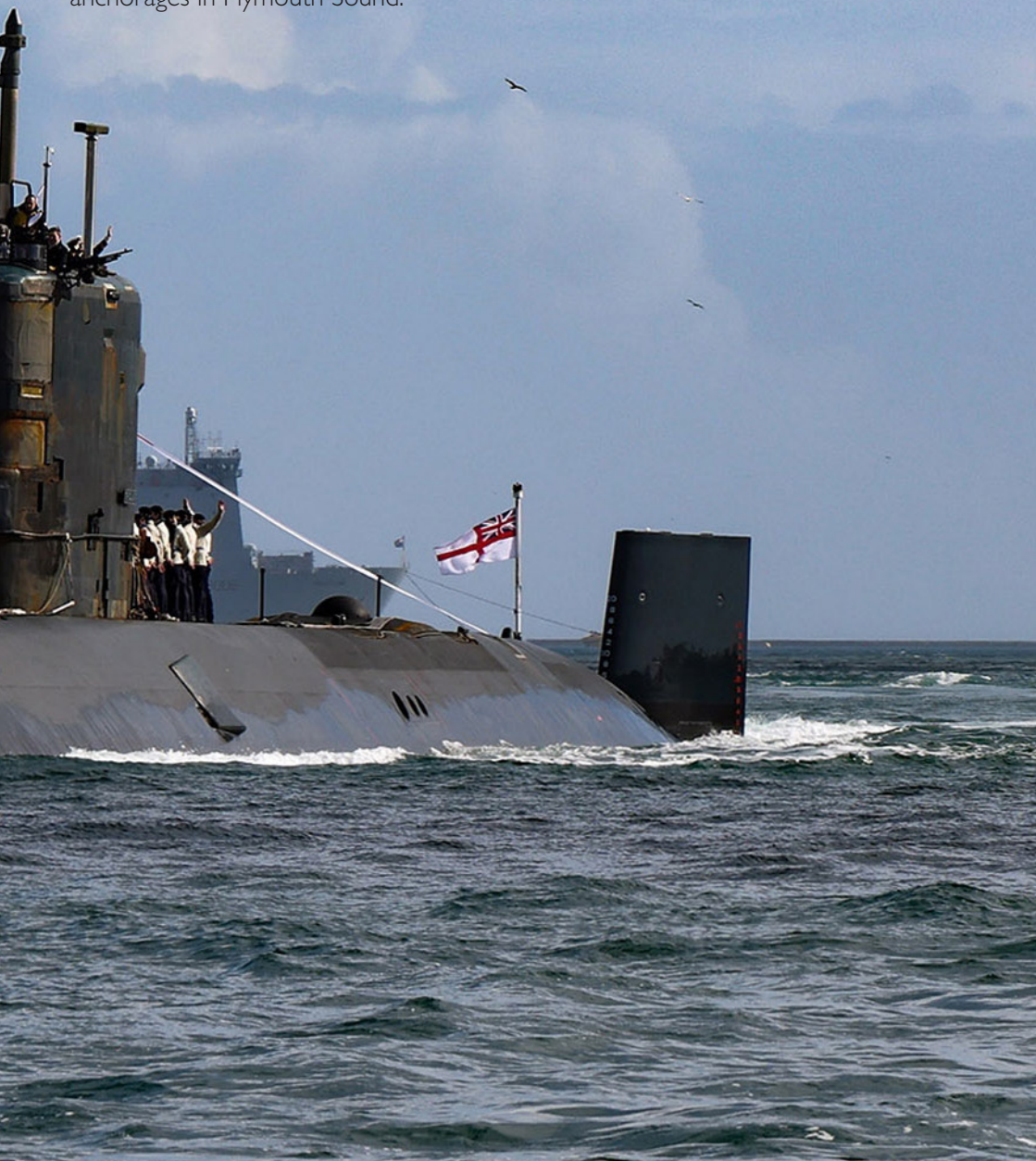
Why do I need this booklet?	3
What is a radiation emergency?	4
Who would be affected?	5
How will I know if there is a radiation emergency?	8
What should I do and why?	9
What about food and drink?	11
How will children be cared for at school?	11
What are radioactivity and radiation?	12
Who has produced this information?	14
Where can I get more information?	14

This booklet has been produced by Plymouth City Council in consultation with Cornwall Council, Devon County Council, South Hams District Council, the Ministry of Defence and Devonport Royal Dockyard Limited (DRDL).

WHY DO I NEED THIS BOOKLET?

This booklet tells you what you need to do in the extremely unlikely event of a radiation emergency at the Devonport Site.

In this booklet “Devonport Site” means those areas at Devonport owned by the Ministry of Defence (MOD) and Devonport Royal Dockyard Limited (DRDL). The Devonport Site includes the Dockyard Port of Plymouth, along with moorings and anchorages in Plymouth Sound.



WHAT IS A RADIATION EMERGENCY?

The Devonport Site operates berths and maintains nuclear powered warships.

In the very unlikely event that there is significant incident involving a vessel's nuclear reactor a radiation emergency could occur:

If this happened, radioactive material could be released from the Devonport Site into the air and/or water:

In the unlikely event of an airborne release, radioactive material would be dispersed downwind. A proportion of this radioactive material would fall to the ground or water / marine environment.

We work with weather forecasters who provide detailed advice about wind direction. This advice would help us understand how any radiation is dispersed and which areas may possibly be affected.

If there is a radiation emergency involving a release of radioactive material, people could be exposed to beta radiation and gamma radiation (like X-rays).

This booklet tells you what to do in the very unlikely event that this happens. If necessary, the emergency services (which include the police, fire and rescue service and ambulance service), local councils, health services and the Environment Agency (who are all responsible for protecting the public) will coordinate an emergency response.

The design of nuclear-powered submarines and ships means the likelihood of a radiation accident is extremely remote. There is no risk of a nuclear explosion.

In a radiation emergency involving a release of radioactive material, you could be exposed to radiation by:

- breathing in contaminated air and gases (inhalation)
- touching contaminated surfaces
- eating or drinking contaminated food or water (ingestion)
- direct exposure to radiation

Radiation is a form of energy we are exposed to all the time, from natural and man-made sources. In some forms it can be harmful to people and other living things as it can damage cells. This can result in damage to organs and/or long-term effects.

By taking the advice given in this booklet, you can reduce the effects of exposure to radiation.

Radioactivity, limits and hazards are explained further on pages 12 and 13.

WHO WOULD BE AFFECTED?

You have been given this booklet because you either live or have a business in one of the detailed emergency planning zones around the Devonport Site.

The detailed emergency planning zones are areas around the Devonport Site, which extend to a minimum distance of 1.5km from the operational submarine berths, moorings and anchorages.

If you live, or have a business, in an outline planning zone and have been identified as being in a vulnerable group, then you will also receive this booklet.

The outline planning zones are areas which extend to 5km from central points in the site, the moorings and the anchorages.

The maps on this page and pages 6 and 7 show the areas for the detailed emergency planning zones and the outline planning zones.

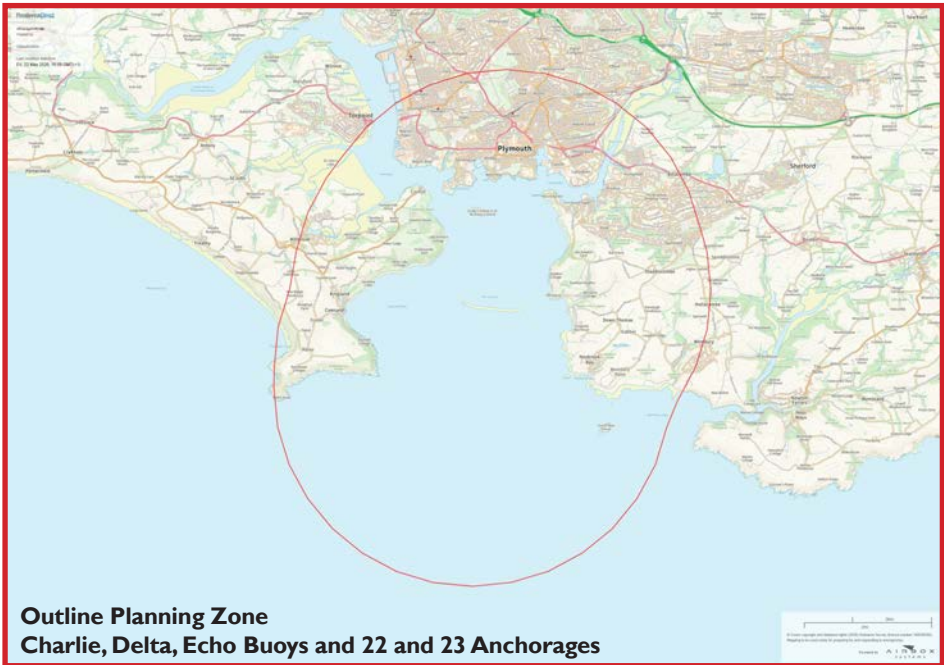
The maps below show the areas for the Detailed Emergency Planning Zones



The maps below show the areas for the Detailed Emergency Planning Zones



The maps below show the areas for the
Outline Planning Zones



HOW WILL I KNOW IF THERE IS A RADIATION EMERGENCY?

If there is a radiation emergency, the public will be informed through official channels, including:

- Television
- Radio
- Social media and website updates by councils, the police and the Ministry of Defence (Royal Navy)
- The Emergency Notification System

These are the main and reliable sources of information for the public.

INFORMATION ABOUT THE NAVAL BASE SIREN

You may hear the Naval Base siren, which sounds with a rising and falling note.

The siren is not intended for the public. It is used to alert personnel on the Devonport Site that there is an incident and that they must go to shelter or their duty stations.

The siren is tested every Monday morning at 11.30am. These routine tests do not indicate an emergency. The Naval Base “all clear” signal is given by sounding the siren on a steady note for at least one minute.

Although the siren can be heard in nearby areas, members of the public should always rely on official announcements for information and instructions.



WHAT SHOULD I DO IF THERE IS A RADIATION EMERGENCY AND WHY?

1 Go indoors and stay there. This is because levels of radiation could be higher outside.

Staying inside is the most important safety advice.

You should stay inside because levels of radiation may be higher outside.

Keep your pets indoors.

If you are away from home when there is a radiation emergency, go into the nearest building.



2 Close all windows and doors

You should close external doors and windows to stop radioactive material from outside coming inside.

3 Put out fires and boilers and shut off air conditioning units

Fans, air conditioning units, boilers, gas fires and heating systems draw in air from outside. You should switch off these things (and damp down open fires) to stop radioactive material from outside coming inside.



4 Listen to local TV or radio or check social media for more instructions

During a radiation emergency, advice will be given out regularly on local television, radio or social media.

TV

BBC 1

ITV

Sky News

RADIO

BBC Radio Devon – FM Radio 103.4 & 95.7, DAB, Freeview channel 712 and BBC Sounds

BBC Radio Cornwall – FM Radio 95.2, DAB, Freeview channel 713 and BBC Sounds

Plymouth City Council will provide regular information updates on Facebook and on its website: www.plymouth.gov.uk

Announcements will be made about:

- the care of children at school
- your food and water supply
- the delivery of stable iodine tablets
- care of animals and pets



5 Do not make unnecessary mobile or landline phone calls

We ask that you limit your use of mobile phones and landlines to ensure that any 999 emergency calls can get through to the appropriate agency, (e.g. the ambulance service, the fire service or the Police).

Mobile and landline phone systems can become overloaded. If this happens the emergency services will not be able to contact each other.

6 Do not leave the area

It is very unlikely that an evacuation of the area will be needed. If there is any need for an evacuation, details will be given on local television, radio and social media. They will tell you what to do and when.

We advise that you do not leave the area. Roads may be closed or become gridlocked, and the emergency services may not be able to get through to do their job.

7 Only take the stable iodine tablets provided, if you are told to do so

These tablets help to protect the thyroid from harmful effects of radioactive iodine. It is very unlikely that radioactive iodine would be released into the air. However, if this happens then staff from the Devonport Site will deliver tablets to addresses in the affected areas. This will happen within a few hours of an emergency. You will also get advice on how to take them when the tablets are delivered.



You should make sure that everyone in your house or business premises knows what to do if there is a radiation emergency.

Please make sure you have adequate arrangements in place to tell visitors.

WHAT ABOUT FOOD AND DRINK?

It is unlikely that tap water, food or drink in your house that is covered or sealed, will be affected. You should wait for advice before eating anything stored outside or growing in an allotment or garden. More advice and information will be given out as an incident progresses.

Advice will also be given to farmers, fishers and other food producers.

HOW WILL CHILDREN BE CARED FOR AT SCHOOL?

Children at school will be kept inside to protect them from radiation. Windows and doors will be closed and heating and air-conditioning units will be shut down.

Children will be given stable iodine tablets from the school's supply, if required when instructions to take them are received.

Do not risk exposing yourself or your children to higher levels of radiation by going outside to collect them.

You should tune in to local television, radio and social media to find out about the care and return of children at school.



WHAT ARE RADIOACTIVITY AND RADIATION?

Everything is made up of tiny building blocks called atoms.

Each atom is made up of electrons which orbit around a nucleus. This nucleus contains protons and neutrons.



Some atoms are unstable. They can become stable by getting rid of some of their protons, neutrons and electrons. They are termed radioactive and give off radiation.

There are three types of radiation: Alpha radiation, Beta radiation and Gamma radiation.

Alpha radiation



Heavy positively charged particles, each made up of 2 protons and 2 neutrons.

Beta radiation



High speed electrons (negatively charged).

Gamma radiation



Similar to X-Rays. They penetrate further.

You cannot be contaminated with radiation, but you can become contaminated if you come into contact with radioactive materials.

The effect remains with you until you are 'decontaminated', so the contamination is removed.

How radiation could affect your body

Radiation can cause changes to molecules and tissue in the body. It can also change or affect DNA, the molecule which contains the information used to control our growth and development.

This can lead to biological effects such as cell changes. It is possible that these changes may not show up until some time after exposure to radiation.

Different types of radiation can cause different effects and some parts of the body are more sensitive to radiation than others.

Studies have shown that the risk of an effect from exposure to radiation increases with the radiation dose.



The DNA helix

Radiation measurement – quantities and units

The unit by which the amount of radioactivity is measured is the becquerel

1 becquerel (1 Bq) = 1 atomic disintegration per second

The effect of ionising radiation on the body is measured in Sieverts. The sievert (Sv) is the unit of radiation dose. The sievert is a large quantity so often the term millisievert or microsievert is used.

1 millisievert (1 mSv) = 1/1000 Sv

1 microsievert (1 μ Sv) = 1/1,000,000 Sv

For comparison 1 millisievert is less than half the average annual dose from natural radiation in the UK. 1 microsievert is approximately equal to a tenth of the dose incurred during a flight from the UK to Spain.

Hazards from a radiation emergency

In a radiation emergency, you could be exposed to radiation by:

- breathing in contaminated air and gases (inhalation)
- touching contaminated surfaces
- eating or drinking contaminated food or water (ingestion)
- direct exposure to radiation



1 Inhalation



2 Contaminated surfaces



3 Ingestion



4 Direct exposure

WHO HAS PRODUCED THIS INFORMATION?

Plymouth City Council prepared this booklet in consultation with Cornwall Council, Devon County Council, South Hams District Council, the Ministry of Defence and Devonport Royal Dockyard Limited (DRDL). It was prepared according to the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPIR).

REPIR requires that the Ministry of Defence and DRDL, as the Devonport Site operators, have emergency plans in place. It also states that the local authorities must provide prior information to people who live or work in the area surrounding the Devonport Site who may be affected by a radiation emergency.

WHERE CAN I GET MORE INFORMATION?

The emergency plan for the area around the Devonport Site is called, the Devonport off-site Emergency Plan (DOSEP).

It is written by Plymouth City Council as the lead local authority. The plan outlines the roles of the Ministry of Defence, DRDL, the emergency services and the other local civil authorities in the event of a radiation emergency.

You can view the DOSEP at www.plymouth.gov.uk/emergencies or www.cornwall.gov.uk.

There is a free emergency notification service for residents and businesses close to the Devonport Site to inform them in the very unlikely event of a radiation emergency.

Registration for emergency notifications is via the Plymouth City Council, Cornwall Council or Devon County Council websites. To register for this service visit www.plymouth.gov.uk/emergencies.

You can get more information on radiation and the Devonport Site from:
Nuclear Safety Assurance, Emergency Planning and Response Team, Howard Block, Building B128, HM Naval Base, Devonport, Plymouth PL2 2BG
Email : NAVYNBCD-NSAEPR@mod.gov.uk

You can also get this booklet in different languages, large print, other formats and easy read. Call 01752 668000 and ask for the Civil Protection Service.



SUMMARY ADVICE

If there is a radiation emergency, you will be told of the emergency via announcements on television, radio or social media and if you have registered for the emergency notification system at www.plymouth.gov.uk/emergencies.
You may also hear a wailing siren which sounds to warn people on the Devonport Site.

Please stay calm and follow this advice:

- go indoors and stay there
- close all windows and doors
- put out fires and boilers and shut off air conditioning units
- do not make mobile or landline phone calls except in case of an emergency call
- do not leave the area
- take stable iodine tablets ONLY if you have been told to or as soon as possible after being advised to take them
- listen to local radio, social media or television for more instructions

TV		
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RADIO	
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