

What to do in a radiation emergency

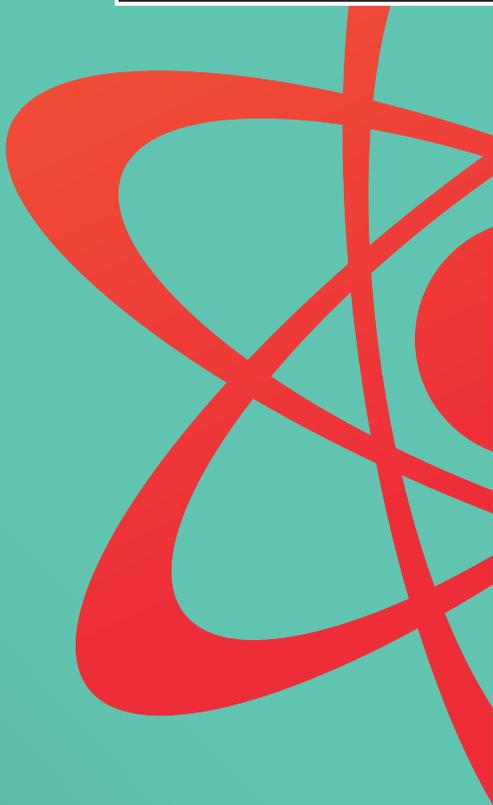
October 2023–2026

A guide for residents living in the outline planning zone

www.portsmouth.gov.uk

This guide tells you what you need to do in the extremely unlikely event of a radiation emergency at Portsmouth naval base.

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 where you can find it easily.



What is a radiation emergency?

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

Who will be affected?

If an accident happened, it probably wouldn't affect people more than half a kilometre (500 yards) from the warship, and because of the size of the naval base this would probably only affect people within the base.

Information about what to do in the event of a radiation emergency at the operational berth nuclear site is routinely provided to people who live within the Detailed Emergency Planning Zone, which is 1.5km from the berth. By law we also provide information to everyone who lives in the Outline Planning Zone, within 5km (3 miles) of the naval base's operational berths - including anchorages in the Solent (see map). You live in this zone.

What is an outline planning zone?

The Outline Planning Zone surrounding the Portsmouth operational berths is 5km.

Outline planning zones are circles around specific sites. They help police, fire and other emergency services to draw up public protection plans ready to be put into operation if needed.

Protective actions for people in the Outline Planning Zone would only be activated if it was determined the risk from the event extended beyond the 1.5km area for which detailed emergency plans already exist. If the plan for the wider area was activated it would be a decision based on the best available information.

What could happen in a radiation emergency?

Usually, all radioactive material would be contained in the submarine or ship. In some extreme circumstances it is possible that some of this radioactive material could escape and affect areas close to the vessel or downwind of it.

In such an emergency, people in the naval base who were very close to the vessel could be exposed to gamma radiation, which is very similar to x-rays.

The main risk to the public would be if very tiny radioactive particles were released into the air. They might be carried by the wind and could settle on people or objects that people

were in contact with. These tiny particles are unstable and give off radiation.

You could be exposed to radioactive particles by:

- Inhaling contaminated air or gases
- Having contact with contaminated surfaces
- Eating or drinking contaminated food or water
- Direct exposure from particles as they are blown along in a 'plume'

Map of affected area

1. In this guide 'Portsmouth naval base' means the areas at HMS Nelson owned by the MOD and Her Majesty's Naval Base (HMNB) Portsmouth.

2. We show the affected areas as circles to make it easier to understand. The actual zone goes out to the nearest natural or landscape boundary.



In this type of incident the main concern for the public would be exposure to radioactive iodate particles.

Your body can absorb a limited amount of iodates so we can easily keep people safe by giving them stable iodine tablets, these contain safe iodates and minimise the health risks, by preventing the body absorbing certain harmful material.

The main way to stay safe is to **stay inside** with your windows and doors shut, then none of the radioactive particles can reach you. More instructions on what to do are on the following pages.

What can radiation do and how do I stay safe?

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 humans and other living things because it can damage cells. This can result in damage to organs or other long-term effects.

How will I know about an emergency?

You will know if there is a radiation emergency because the police will tell you, or you will hear or see a news announcement.

The naval base siren will also be used – a rising and falling wailing note. This siren is tested at 9.30am on the last Wednesday of February, June and October.

What should I do if there's an emergency?

Follow the **Go in, Stay in, Tune in** advice.

Go in

In a radiation emergency the best thing to do is go indoors.

- **Close all your doors and windows** to reduce the risk of contamination entering the building.
- **Switch off** fans, ventilation equipment or appliances such as central heating boilers and gas fires, which draw air from outside. This will help stop any contamination entering the building.
- **Put out** or damp down open fires

Stay in

- **Don't go outside**, where radiation could be higher, unless you're told to.
- **Keep pets indoors**, to stop them bringing possible contamination into the house.

- **If your children are at school, the school will look after them**

- going to collect your children may expose you and them to radiation.

Tune in

- During an emergency, we will publish up-to-date information and advice on Portsmouth City Council's website www.portsmouth.gov.uk
- information and advice will also be on local radio and TV and websites.
- **Keep listening** and watching
- **Follow any instructions** you are given

Local radio stations include:

- Radio Solent (96.1 FM, 999 MW)
- Heart FM (97.5 FM)
- Capital (103.2 FM)
- Wave (105.2 FM)
- Isle of Wight Radio (107 & 102 FM)
- Greatest Hits Radio South Coast (107.4 FM)
- Express FM (93.7 FM)

Health issues:

Call NHS 111 on telephone number 111 or go to the website www.111.nhs.uk

Don't use the phone unless you urgently need help

In an emergency, mobile and landline networks might be overloaded. If you must make a call, please keep it short.

When should I take stable iodine tablets?

Exposure to radioactive material can be hazardous. But taking stable iodine tablets minimises the health risks, by preventing the body absorbing certain harmful material.

Tablets will only be made available to those who need them, if the information available at the time tells us it is appropriate.

If you receive tablets then only take them when told to do so – these arrangements will be confirmed by radio and TV announcements.

It is important you don't take the tablets until you are told to, if they are taken at the wrong time they might not protect you when it is needed.

Where appropriate, children at school will be given stable iodine tablets.

After being told to take the tablets you should still stay indoors. The tablets help to protect you, but staying inside is still the best protection. You should not take the tablets until told to do so.

We will deliver tablets to those who need them based on the information at the time.

Don't worry if you have friends or relatives living further from the base that don't get tablets, there will be no immediate need for them to take the tablets. In the hours following an accident the emergency responders will decide if the response area should be expanded, based on contamination levels. It's unlikely they will have to take this step.

Should I leave the area?

The best thing to do is stay at home, you will be much safer indoors with your windows and doors shut. There will probably be no need for an evacuation. But if you are advised to leave, follow the advice you're given.

If you do have to leave, you should stay with friends or relatives outside the affected area. If you don't have anyone you can stay with, we will make special arrangements to look after you in a safe place.

Use your own transport. If you don't have transport, you'll be told where to meet and transport will be provided.

Entry to evacuated areas will be carefully controlled until the emergency has ended so don't worry if you have to leave your home

If you are advised to evacuate, use this checklist:

- Get your family and pets together.
- Get a large bag or suitcase and pack the following things.
 1. Warm clothing and bedding.
 2. Medicines or special food your family and pets need.
 3. If you have children, think about baby food, clothes, nappies, toys and books
 4. Private documents and valuables, such as bank books and passports.
- Make sure fires are out and that cookers, ventilation equipment, fans, TVs, electric fires and other appliances are switched off and unplugged.
- Lock up your house and any other buildings and leave.
- Use the space to the right to write down any other things that you think you will need to remember:

What happens to schools?

In the event of an accident the school will look after the children – going to collect your children may expose you and them to radiation. When it is safe for children to leave the building the school will contact you.

Schools more than 1.5km from the naval base will be told about any accident by the council and will look after any pupils whose parents live within the 1.5km zone and who may not be able to collect them.

Will this affect 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 on this will be given out as an incident progresses.

What do I do when the immediate danger has passed?

You should keep listening and looking for announcements and updates on the news.

Write your list here



How to find out more

If you would like to find out more about the Ministry of Defence's nuclear-powered vessels, visit the Royal Navy website:

www.royalnavy.mod.uk

If you would like to find out more about the emergency plan for the area around the naval base, visit the Portsmouth City Council website at

www.portsmouth.gov.uk and search 'Reactor emergency plan'.

You can get more information on radiation and the Radiation (Emergency Preparedness and Public Information) Regulations from these websites:

UKHSA:

www.gov.uk/government/organisations/uk-health-security-agency

- Health and Safety Executive:
www.hse.gov.uk

More copies of this leaflet are available by:

- Writing to:
**Emergency Preparedness,
Resilience & Response Team
Portsmouth City Council
Civic Offices
Guildhall Square
Portsmouth
PO1 2AL**

Emailing emergency.planning@portsmouthcc.gov.uk

- Calling **023 9268 8052**

You can also read and download leaflets from our website at www.portsmouth.gov.uk by searching 'Reactor emergency plan'.

You can get this Portsmouth City Council information in large print, Braille, audio or in another language by calling 023 9268 8052