

Prior information to the public- Radiation Emergencies during the transport of radioactive material

Who is this information for?

This information is for anyone who may be affected by a radiation emergency when radioactive material is transported by road, rail or inland waterway in Great Britain.

When significant quantities of radioactive material are transported they must be packaged and transported in compliance with strict regulatory requirements. This legislation requires that they will be labelled as 'class 7' goods and radiation trefoils must be displayed both on the vehicle and on the package. Those sending and transporting radioactive material must prepare emergency plans prior to transporting them and test those plans if they are to be used on more than one occasion.

The information provided here is generic as it is not practicable to identify specific locations where a transport radiation emergency may occur or who might be affected by such an emergency. This is because radioactive material is frequently transported for medical, research, industrial and energy purposes throughout the road and rail networks in Great Britain. In addition, the specific routes followed when transporting radioactive material may vary as a result of local traffic conditions or for security purposes.

What is a transport radiation emergency?

A transport radiation emergency is an abnormal situation or event arising during the transport of radioactive material that requires prompt action to reduce serious consequences for human life, health and safety, quality of life, property or the environment. It would not, for example, include a road traffic accident which did not affect the radioactive material being transported.

Information about the nature and effect of a transport radiation emergency.

The information below includes:

- Basic facts about radioactivity and its effects on persons and on the environment.
- The potential consequences of a transport radiation emergency.
- Emergency measures to alert, protect and assist the general public in the event of a transport radiation emergency.
- Information on actions to be taken by the general public in the event of a transport radiation emergency.

A description of the authority, or authorities, responsible for implementing the emergency measures.

Basic facts about radioactivity and its effects on persons and on the environment

Public Health England (PHE) has produced information about radioactivity and its effects on persons and also information for the public on nuclear emergencies:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/467205/Basic_concepts_of_radiation_October_2015.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/467198/Nuclear_emergencies_-_information_for_the_public_October_2015.pdf

This 2-part leaflet set is primarily intended to support the operators of nuclear sites in providing information to the public, however, the first document applies equally to radioactive material being transported and the second includes information which may also be applicable in the case of a transport radiation emergency.

The potential consequences of a transport radiation emergency

The main consequences of a transport radiation emergency are the potential for exposure of people to radioactive material that may be released from a damaged package and/or exposure of people to radiation coming from the radioactive material.

If radioactive material escapes from a package then the environment around the scene of the emergency may be radioactively contaminated. Where a package is involved in a fire or due to wind or rain then contamination may be spread beyond the immediate surrounding area.

Emergency measures envisaged to alert, protect and assist the general public in the event of a transport radiation emergency.

If a radiation emergency does occur during transport then information will be provided to those likely to be affected to reduce or prevent exposure to radiation by the Local Authority for the area in which it occurs, supported by the emergency services as well as those involved in transporting the radioactive material.

The driver or crew of the vehicle, train or vessel will normally alert the public in the immediate vicinity of an emergency. Where they are equipped and it is safe to do so, they will set up temporary barriers to prevent access to the area by the public.

The driver will alert the emergency services and notify the consignor (sender) and the carrier about the radiation emergency. The consignor and carrier will initiate their emergency plans and, together with the driver, support the emergency services responding to the emergency.

Appropriate information on action to be taken by the general public in the event of a transport radiation emergency.

- Stay as far away from the scene of the emergency as possible and at least 100 metres away. If leaving the scene do not approach or touch any packages whether they appear to be damaged or not.
- Do not touch or walk through liquids or substances which may have leaked from packages.
- Stay or move upwind of the scene of the emergency as instructed by the driver, crew or emergency services.
- If you are travelling in a vehicle, close all windows and vents.
- Leave the area if you are advised to do so by the driver, crew or emergency services.
- If you are indoors, then stay there. Keep pets indoors and switch off fans or other appliances which draw air in from outdoors.

- If you are outdoors where practicable make your way to nearby premises where you can remain indoors.
- Tune in to Radio, TV and check online news services for information from trusted sources.
- Advise the emergency services about the incident if you are unsure as to whether notifications have been made.
- Do not use the telephone unless you need urgent help, in order not to overload the telephone network.

If you believe you have been exposed to radiation or that you or your clothing or possessions may be contaminated with radioactive materials, listen to/ ask for instructions from the emergency services officials (for example emergency services or Department of Health) and where necessary contact your doctor.

The authority or authorities responsible for implementing the emergency measures and actions above.

Specific authorities are not listed here as they will be different in each case depending on the location of the emergency within Great Britain.

In general the authorities responsible for implementing the emergency measures and actions are the:

- Driver and crew of road vehicle or a train, or the master of a vessel,
- Emergency services (Police, Fire, Ambulance, Coastguard (inland waterways),
- Local Authority in which the emergency has occurred,
- Carrier of the goods involved, and
- Consignor (sender) of the radioactive material.