

Guidance for Pollution Prevention

Hospitals and healthcare establishments: GPP 25

Version 1.1 May 2021

This guidance has been produced by the Northern Ireland Environment Agency (NIEA) and the Scottish Environment Protection Agency (SEPA). **Please note: Natural Resources Wales (NRW) are currently reviewing this guidance for Wales and an updated version will be available shortly.**

For Northern Ireland, Scotland, this document provides guidance on environmental legislation. These guidelines are not endorsed by the Environment Agency as regulatory guidance in England. For guidance on environmental regulations in England go to www.gov.uk.

To find the relevant regulations visit www.legislation.gov.uk.

Guidance for Pollution Prevention (GPP) documents are based on relevant legislation and reflect current good practice. Following this guidance will help you manage the environmental responsibilities to prevent pollution and comply with the law.

If you cause pollution or allow it to occur, you will be committing a criminal offence. Following these guidelines will help you reduce the likelihood of a pollution incident. If one does occur contact the environmental regulator immediately on the relevant incident hotline number: In Northern Ireland and Scotland call **0800 80 70 60**, in Wales call **0300 065 3000**.

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Section 1. Introduction

1.1 Who is this guidance for?

This guidance is for facilities, sites or establishments (public and private) that provide healthcare and associated services. This includes hospitals, health centres, community healthcare, general practitioner (GP) surgeries, dental services, long-term care facilities, hospices, pharmacies and veterinary practices.

Why has this guidance been developed?

This guidance has been developed to provide advice and guidance to healthcare establishments in understanding their legal requirements with regard to protecting the environment and how they can minimise the impact of their activities on the environment.

This guidance covers the following sections:

- Water management – **section 2**
- Water use and efficiency – **section 3**
- Pharmaceuticals – **section 4**
- Waste management – **section 5**
- Oil and chemicals – **section 6**
- Energy efficiency – **section 7**
- Nuisances – **section 8**
- Sustainable procurement – **section 9**
- Transport – **section 10**
- Biodiversity/nature conservation – **section 11**
- Climate change adaptation – **section 12**
- Incident response – **section 13**

1.2 Legal requirements

There are laws that protect land, water, air, wildlife and people from pollution. If you cause pollution you will be potentially committing an offence. Penalties include fines, imprisonment, Fixed Penalty Notices, stop-work notices or equivalent and having to pay clean-up costs, along with damage to your reputation.

The legal requirements are different throughout the United Kingdom (UK) (England, Northern Ireland, Scotland and Wales). If you are located in **Scotland** or **Northern Ireland** you can find information on your legal environmental obligations by visiting the NetRegs website (see website list). In **Wales** guidance on regulations can be found on the Natural Resources Wales (NRW) and Welsh Government website (see website list).

Formal approval (a licence, permit or other authorisation) may be required when carrying out works or activities that have the potential to cause harm to the environment. It can take up to four months to process an application for formal approval, it is therefore important you contact the environmental regulator early on in the project.

For activities requiring a discharge to sewer, contact your sewerage provider for approval.

1.3 Which type(s) of formal approval may I need?

In this document we refer to 'formal approval', which covers the authorisation(s) you may need from the environmental regulator or sewerage provider. They may be called a consent, licence, permit, authorisation or exemption. You may be committing an offence if you carry out your works or activities without all the relevant formal approvals in place.

You are responsible for ensuring that you understand and comply with all applicable legislation wherever your site is located. If you have any concerns, or require clarification, contact the environmental regulator before taking action. Ignorance is no defence under law, so you need to understand which laws apply to you and your activities.

1.4 Pollution prevention

Pollution occurs when substances released to water, land or to air have a harmful effect on our environment. It can affect our drinking water supplies, people's health, business activities, wildlife and habitats, and our enjoyment and use of the environment. You might not see it, but you can pollute it.

Pollution can happen accidentally or deliberately, and can come from a single place (point source) or from lots of different, possibly unknown and unconnected sources (diffuse sources).

Many different substances can cause pollution – common examples include chemicals used in healthcare, oils and fuels, and wastes.

You should understand your site and how your activities could affect the environment and cause pollution. Think about what pollution linkages you have (see Figure 1). The pollution linkages include a source i.e. where the pollution can come from. The next step is to think about how the pollution can travel through the environment, the pathway. Finally the receptor i.e. who or what can be affected by the pollution.

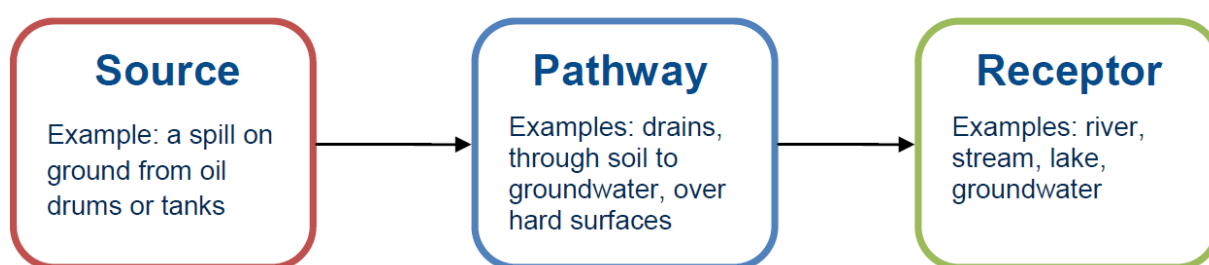


Figure 1: Example of a pollution linkage using the source > pathway > receptor model.

NOTE: Groundwater can be both a pathway and a receptor.

Your site and activities will only cause harm to the environment or people if you have all of these present: a source, a pathway and a receptor. You should put in place measures to break the links or weaken the links. By doing this, you can identify how to prevent or reduce the likelihood of pollution and reduce the impact of any problems which may occur.

It is important that you fully understand the local drainage network as pollution is often caused by mistaking a surface water drain for a foul/combined sewer (see Figure 2.)

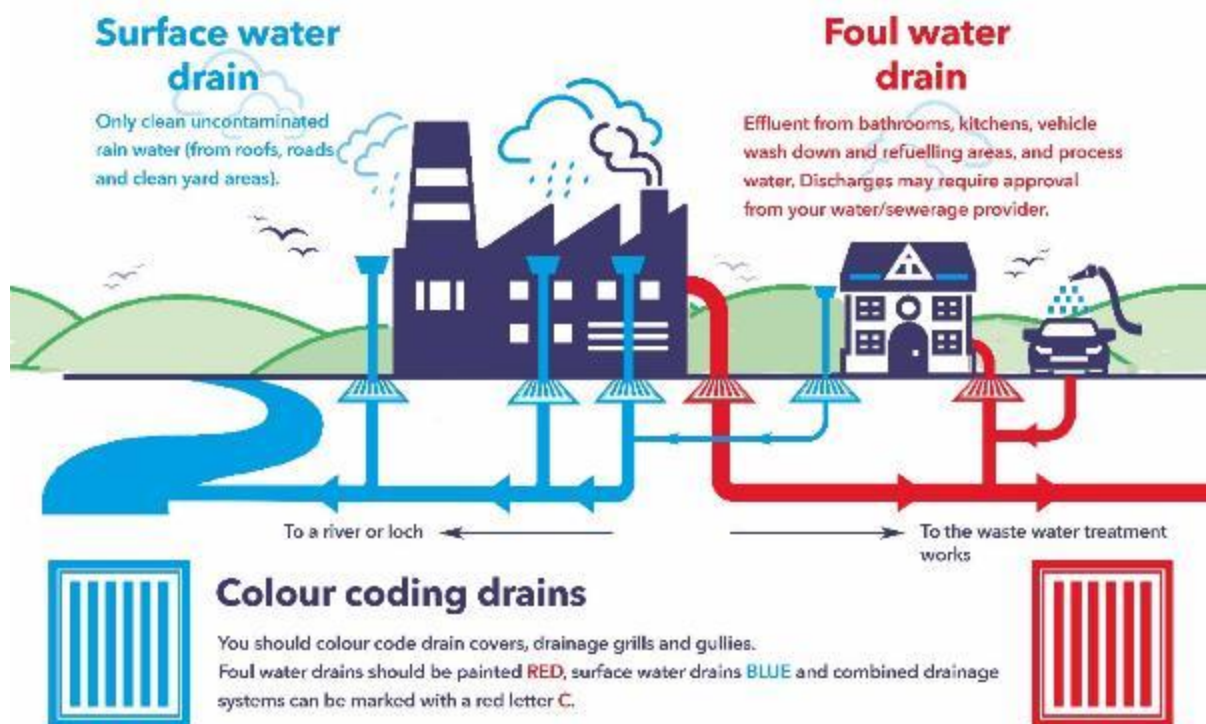


Figure 2. Drain identification.

The clean-up cost of pollution can be expensive and time consuming particularly if groundwater becomes contaminated. The costs of the clean-up must be borne by the person/business causing the pollution. There may also be additional costs including fines, and reputational cost i.e. loss of future work.

This guidance has been developed to help you reduce the likelihood of an incident. However, if one does occur you must report it to your environmental regulator immediately via the Incident Hotline number **0800 80 70 60** - see section 13. A rapid response to incidents will help to minimise the environmental impact and could reduce the overall costs – For more information refer to section 13.

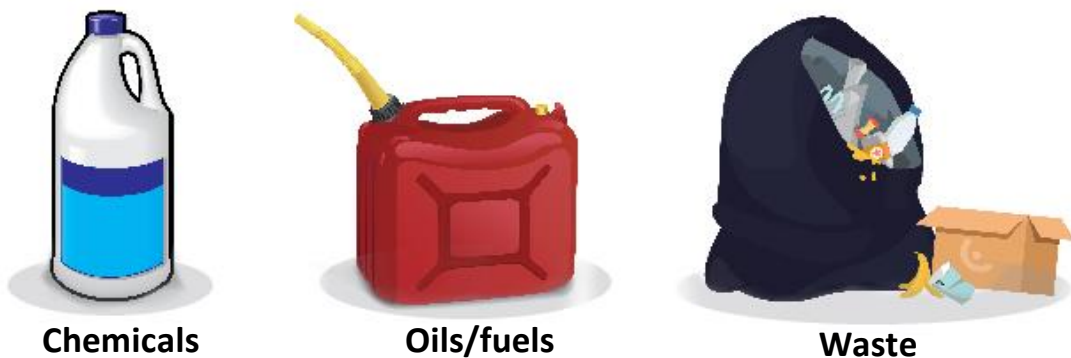
Section 2. Water management

This section looks at how to manage water to prevent pollution and the options available when for treatment and disposal.

2.1 Prevent water pollution

Water pollution can come from a number of different sources. Many solids, liquids and gaseous substances can cause pollution if they enter the water environment.

Common pollutants include:



e.g. disinfectants, cleaning products, pharmaceuticals

The key steps to prevent water pollution are:

1. Choose environmentally friendly products/materials.
2. Store and handle materials carefully.
3. Prevent pollution from uncontrolled releases or leaks, and
4. Be prepared for pollution incidents.

Choose environmentally friendly products/materials

The first step in preventing water pollution is to choose products/materials that pose a minimal risk to the environment.

Example: Cleaning products, such as disinfectant, used in healthcare facilities contain different chemicals that can be harmful to health and the environment. Where possible you should prioritise disinfectants that are as effective but less harmful to the environment and human health.

If it is not possible to substitute with a more environmentally friendly alternative, follow the steps below:

- Store and handle materials carefully,
- Prevent pollution from uncontrolled releases or leaks,
- Be prepared for pollution incidents.

Store and handle materials carefully

It is important that you store and handle materials in a responsible way. You should:

- store hazardous substances according to the manufacturer's instructions
- label containers clearly and accurately
- keep the smallest amount of materials necessary
- store incompatible substances separately, e.g. chemicals that may react with each other
- make sure you are aware of restrictions on the way you can use chemicals
- train your staff to store and handle substances properly
- protect from unauthorised access and accidental damage e.g. vehicle impact.
- carefully choose storage locations with proximity of surface water drains in mind. Don't store materials in a location where accidental spillage/leaks will access a surface water drain.
- consider suitable containment for storage of containers
- ensure containers are fit for purpose when used for storage.

If you store oil, such as petrol or diesel, in containers there are certain legal requirements that you may need to comply with. See GPP2: Above ground oil storage tanks, reference 1.

Prevent pollution from uncontrolled releases or leaks

To help prevent uncontrolled releases or leaks causing pollution, you should:

- take extra care when you handle and/or transport materials.
- mark loading and unloading areas and isolate them from the surface water drainage system. If this is not possible, protect surface water drains using sandbags, mats or other devices.
- store all above-ground storage tanks, drums and containers on an impermeable base within a drip tray, bund or any other suitable secondary containment system to contain any spills. See GPP2: Above ground oil storage tanks, reference 1.
- install drip trays, or other forms of containment, beneath any equipment that is likely to leak or result in spills of pollutants. You should consider roofing storage areas to minimise the impact of rainwater. Empty drip trays regularly so that they do not overflow. You may need to dispose of the contents of the trays as hazardous/special waste.

Be prepared for pollution incidents

Be prepared for pollution incidents. You should:

- prepare a pollution incident response plan and train staff on how to implement it – see GPP21: Pollution incident response planning, reference 2.
- keep absorbent materials, such as sand and other containment equipment, suitable for containing the type and quantity of substances you store and use on your site and make sure your staff know where they are.

- know the drainage system of the site and consider colour coding drains, e.g. keep an updated drainage plan and colour code your drains – Red for foul/combined sewer, blue for surface water (see Figure 2.).

Also, see section 13. Incident response.

2.2 Trade effluent

Trade effluent is any liquid waste, other than surface water (clean, uncontaminated rainwater) and domestic sewage, that is discharged from premises being used for a business, trade or industrial process, including hospitals and healthcare establishments.

Discharges from healthcare premises are categorised as liquid waste that requires treatment before it can be safely returned to the environment.

You must not discharge trade effluent into a surface water drain, surface waters, groundwater or sewers without formal approval from the appropriate agency.

Discharge to sewers

You must have permission from your local water and sewerage provider (In Wales, see reference 3) before you discharge trade effluent to the foul sewer. In Scotland, please refer to the Trade Effluent section of Scottish Water's website (see website list) before you discharge trade effluent to the foul sewer. Discharges should not contain sanitary items, incontinence pads, wet wipes, syringes, dressings, plastics, pills and fats, oils and grease as these may cause blockages in the sewerage system or at the waste water treatment works.

2.3 Swimming and exercise pools

If you want to empty a pool, you should check the best way to dispose of water with your environmental regulator or your local water and sewerage provider.

You will need formal approval to dispose of pool water into sewers, surface waters or ground waters. Usually you will have to store the water in a vented storage pool to allow chlorine to disperse before disposal. This can take at least 5 days, depending on the volume of water.

You should store pool chemicals carefully and avoid causing pollution. See section 2.1 Prevent water pollution, for information on storing and handling materials.

2.4 Waste water treatment

Waste water is anything which flows through a foul water drain/sewer including toilet waste and industrial waste/trade effluent.

It is illegal to discharge untreated or insufficiently treated waste water from your site or property to the environment.

2.4.1 Waste water treatment plants

The typical process for waste water treatment is shown in Figure 3. The process has number of stages, including:

- **Stage 1:** Screening to remove inappropriately disposed of items to prevent damage and blockages in the waste water treatment works.
- **Stage 2:** Stone and grit removed.
- **Stage 3:** Primary treatment - Waste water is allowed to settle and solids sink to the bottom to form sludge. The sludge is sent to sludge tanks for treatment.
- **Stage 4:** Biological treatment – Bacteria in the tanks further treat the waste water.
- **Stage 5:** Final settlement of left over solids.
- **Stage 6:** Clean water discharged back to rivers or sea.

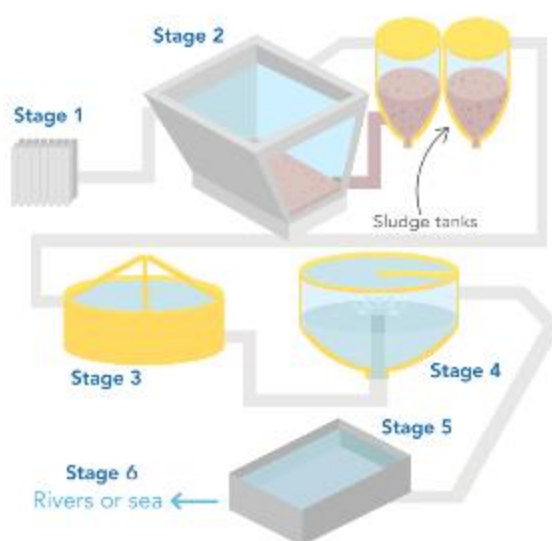


Figure 3. Typical wastewater treatment process. (Courtesy of Scottish Water)

2.4.2 Treatment and disposal of waste water where there is no foul sewer

If your site is not connected to a foul sewer you will most likely be connected to a private waste water treatment and disposal system such as a septic tank or package treatment plant.

Septic tanks use natural biological processes to break down sewage and waste water and produce a discharge that can be made safe and harmless when filtered through well aerated soil, or by another final treatment.

If the natural processes stop, then problems can occur. Non-mains sewerage systems can pollute groundwater (all water lying below the water table or in aquifers) if they are poorly located, built or operated. This can affect water supplies, such as drinking water. It can also pollute surface water in rivers, streams and lochs/loughs.

For information on the treatment and disposal of waste water where there is no foul sewer, see GPP4, reference 4.

Whether your toilet system is connected to a septic tank or water treatment works -

You must not flush sewage related debris down the toilet as these will cause blockages in the system, these items should be placed in bins for proper disposal.

Sewage related debris include:

- | | | |
|----------------------------|----------------------------------|-----------------------------|
| • Sanitary towels | • Wet wipes | • Tampon applicators |
| • Nappies | • Tampons | • Paper towels |
| • Incontinence pads | • Fats, oils & grease | • Dressings |

Section 3. Water use and efficiency

This section deals with water use and efficiency, why water resources are under pressure and key actions that your business can take to minimise water use.

Water resources within the UK are under increasing pressures because of population growth and climate change. Minimising water use is crucial to ensuring there is enough water for the population, economy and the environment. Water is used extensively in healthcare facilities. Some treatments (e.g. renal dialysis, use of hydrotherapy pools) require substantial amounts of water.

In 2016, heating water accounted for 4% of UK carbon emissions . Therefore reducing hot water use also improves energy efficiency and is a key element of climate change mitigation –

See reference 5.

Generally the high water usage areas within healthcare are associated with:

- catering
- medical uses
- sanitary applications (toilets, baths, showers, etc.)
- central boiler plant and cooling
- irrigation/grounds

Key actions to minimise water use:

Identification and improvement

- a) Identify high usage areas - conducting a study into the main areas of water consumption on-site, such as toilets, catering, laundry, vehicle washing and portable water supply
- b) Get water efficiency advice - contacting the local water company for advice on water management techniques and developing a scheme to implement them;

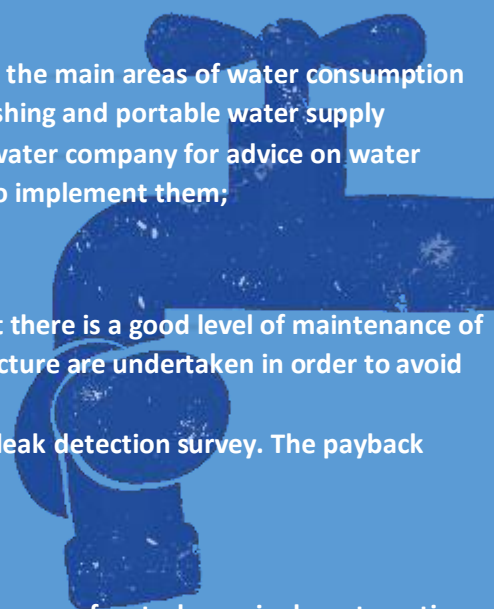
Maintenance

- c) Regular maintenance programmes - ensuring that there is a good level of maintenance of water facilities and that periodic surveys of infrastructure are undertaken in order to avoid loss through leakage
- d) Carry out a leak detection survey - undertaking a leak detection survey. The payback period for cost of repairs is often short

Technology

- e) Adopt water efficient technologies - evaluating the use of waterless urinals, automatic taps and looking for the European water label when upgrading appliances
- f) Install water efficient devices – retrofitting tap aerators and aerated showerheads can reduce water use significantly

For details on how to minimise water use in Northern Ireland visit Northern Ireland Water, in Scotland visit Resource Efficient Scotland, in Wales visit Welsh Water/ Dŵr Cymru – See website list.



Section 4. Pharmaceuticals

4.1 Pharmaceuticals in the environment

This section looks at the effect of pharmaceuticals in the environment, in particular: pharmaceutical pollution; how pharmaceuticals get into the environment; their impact on the environment; and how to limit that impact.

4.1.1 Pharmaceutical pollution

Pharmaceutical pollution is a worldwide threat to humans and the environment.

Pharmaceutical products or medicines (both human and veterinary) are widely used in the UK and their use is growing due to population growth, improved treatments for many previously untreatable conditions and increased patient expectations.

4.1.2 How pharmaceuticals get into the environment



Figure 5: A simplified representation of the medicinal product chain (Adapted from the original Grinten et al., 2016)

Pharmaceuticals can get into the environment in a number of ways, as shown in figure 5. Most commonly they enter the environment:

1. during manufacture,
2. through excretion by humans and animals having consumed them, and
3. by improper disposal into water systems or landfill.

The biggest contribution is from excretion into waste water by humans or onto land and into water by animals.

Whilst waste water treatment plants (WWTP) can remove a large amount of pharmaceuticals, there may be still significant concentrations of medicinal products found in WWTP discharges, see reference 6.

Common medicines detected include:

- painkillers,
- antibiotics,
- hormone disrupting and anticancer medicines,
- medicines for epilepsy and high blood pressure, and
- antidepressants.

The contribution to antimicrobial resistance will be discussed in Section 4.2.

4.1.3 – How to limit the impact from the consumption of medicines

When medicines taken are excreted in urine or faeces they end up in waste water treatment plants (WWTP). These plants are generally not designed to remove such pollutants from wastewater, and results in discharges from WWTP often containing traces of pharmaceuticals.

The options available to limit the impact from consumption of medicines include:

Upstream interventions

- Clear prescribing policies of when to and not to prescribe medicines.
- A prescribing formulary (list of medicine choices) which promotes the use of less environmentally hazardous medicines.
- Clinician and patient education about environmental harm from medicines.
- “Take back” schemes for waste or unwanted medicines from the public.
- Safe disposal messages encouraging take back schemes etc.
- Promotion of self-care and responsibility for personal health, health promotion messages and information on the harm:benefit ratio for medicines.

Downstream interventions

- Improved waste water treatments - improvement of purification techniques.
- The development of techniques to separate and treat waste at the source (e.g. special toilets and urine bags).
- Placing waste water treatment plants at healthcare sites.

4.1.4 – Pharmaceutical waste management

See section 5.2.7 - Pharmaceutical waste.

4.2 Antimicrobial resistance (AMR)

Antimicrobial resistance (AMR) is when microorganisms that cause infection survive exposure to a medicine that would normally kill them or stop their growth.

AMR is a natural process but it is accelerated by a number of actions, such as inappropriate prescribing, poor infection control practices and the use of antimicrobials in agriculture.

Antimicrobial resistance (AMR)...
“is an increasingly serious threat to global public health that requires action across government sectors and society”
World Health Organisation (2018)



Figure 6: Causes of antibiotic resistance (World Health Organisation)

The consequences of AMR include:

- reducing our ability to treat common infectious diseases, resulting in prolonged illness and a greater risk of complications;
- patients remaining infectious for longer due to ineffective treatments, making them more likely to pass infections on to others;
- compromising advances in modern medicine (such as organ transplantation, cancer chemotherapy, and major surgery) due to risk of infection; and
- increasing economic burden on health care systems, families, and societies.

AMR and the environment

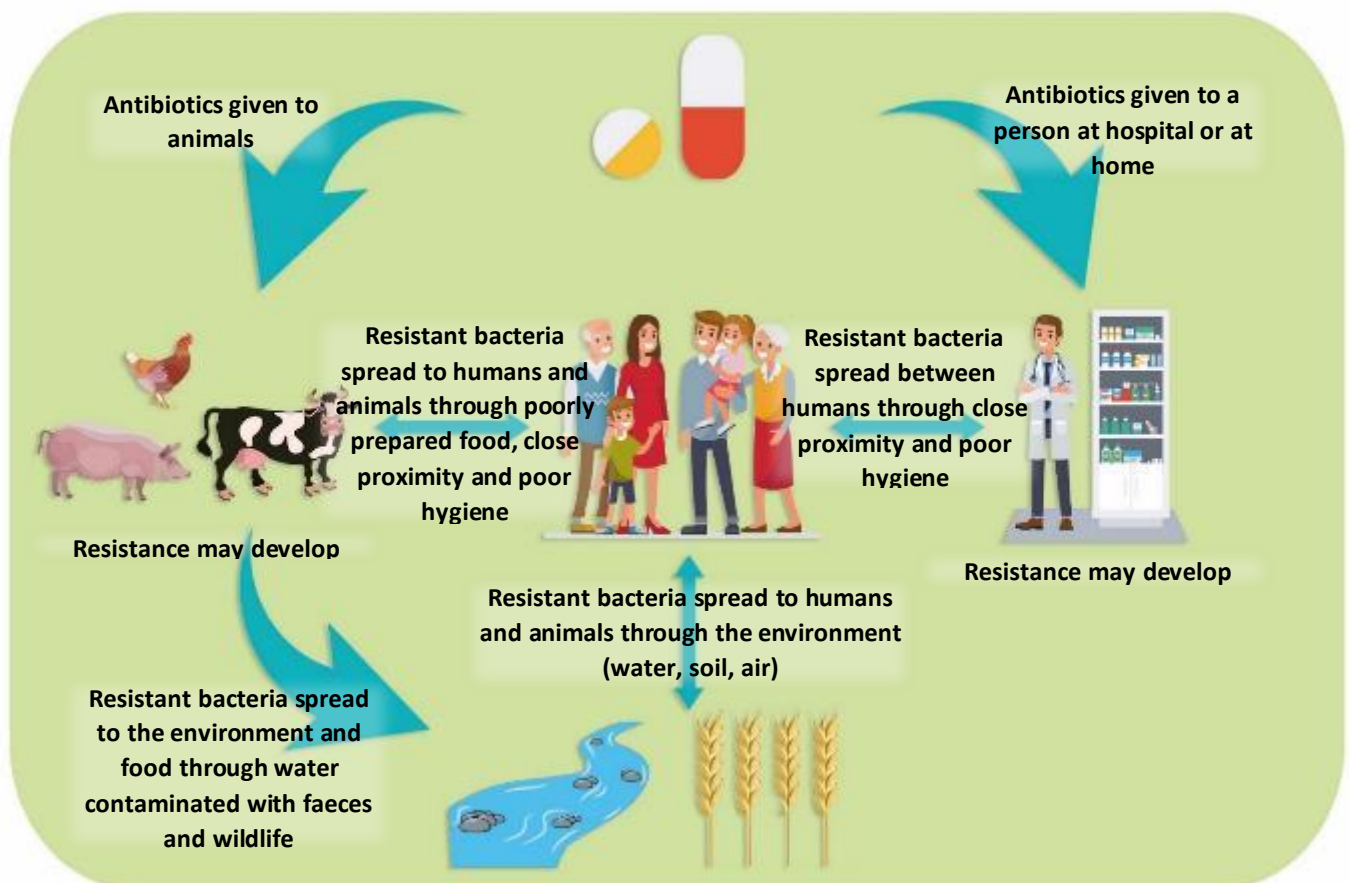


Figure 7. A simplified representation of how antimicrobial resistance can spread.

The environment plays a major role in antibiotic resistance. Bacteria found in the environment can develop resistance through contact with resistant bacteria, antibiotics and disinfectant agents released by human activity. The more resistant bacteria can then spread to people and livestock through food, water and air.

Figure 7. above, shows a simplified representation of how antimicrobial resistance can spread between people, animals, and the environment.

To reduce the likelihood of AMR you can:

- Prevent infections by implementing high quality hygiene and sanitation in all healthcare operations.
- Ensure safe disposal of pharmaceuticals and hazardous waste.
- Pre-treat healthcare waste before discharge in to the waste water system.
- Implement antimicrobial stewardship – see reference 7.
- Optimise the functioning of waste water treatment plants.
- Reduce antimicrobial use in food animals by implementing vaccination, biosecurity and good animal husbandry programmes.
- Pre-treat manure before use as a fertiliser.

Section 5. Waste management

5.1 Duty of Care

Legal waste storage, transfer and disposal are essential for effective pollution prevention.

Under the Duty of Care legislation, see reference 8, you have a legal duty to make sure any waste you produce does not escape from your control. Waste must only be transferred to an appropriately authorised waste facility and transported by a registered waste carrier. It must be accompanied by a Waste Transfer Note, including a written description of the waste with corresponding waste classification code and be disposed of lawfully. You should check the destination and ensure the site is authorised to receive the waste.

You must separate dry recyclable materials such as paper, card, glass, metals and plastics. These must be collected separately from other wastes and managed in such a manner as to allow high quality recycling. In **Wales** see reference 9.



Some types of waste, called 'hazardous wastes' or in **Scotland**, 'special wastes', such as oily wastes, acids, solvents and solvent-based products are very harmful to human health or to the environment.

When dealing with hazardous/special wastes:

- you must store, handle and dispose of these differently to non-hazardous wastes.
- you must not mix different types of hazardous or special wastes together.
- if you mix hazardous or special wastes with non-hazardous wastes then you must consider everything as hazardous or special waste.
- the movement of hazardous/special wastes must be accompanied by a consignment note. This applies to all movements of hazardous waste including collections from businesses by registered waste carriers, movements from one premises to another within the same business and all movements from the waste producer's premises. If you produce or deal with hazardous waste you must comply with the Hazardous Waste Regulations and also follow specific requirements for consigning hazardous waste.

In **Wales** premises that produce hazardous waste must register with NRW as hazardous waste producers. However if they produce less than 500kg of hazardous waste in a 12

month period they are exempt from registering. However, hazardous waste moved from an exempt premises must still be covered by a Hazardous Waste Consignment Note. The unique consignment note code will show that the waste has come from an exempt premises. NRW have published advice that lists certain types of premises that do not need to register, see reference 10. These exceptions only apply in certain circumstances. You should read the advice to ensure that it applies to your premises and activity. See reference 11 for information on how to register as a hazardous waste premises.

Consider the security of your premises too - any waste dumped on your property becomes your responsibility to remove which will cost you money.

If you are located in **Scotland** or **Northern Ireland** you can find out how these waste regulations affect your site. Check the guidance by Environmental Topic section of the NetRegs website (see website list) for information on waste legislation and how you can comply.

If you are located in **Wales** you can find out how waste regulations affect you by visiting the NRW website, (see website list).

Follow the waste hierarchy

When dealing with waste you must take all reasonable steps to apply the waste hierarchy, (see figure 8 below). In **Scotland** and **Northern Ireland** this is a legal requirement.



Figure 8. Waste hierarchy (NetRegs)

5.2 Waste types

5.2.1 Healthcare and clinical waste

Healthcare Waste

Healthcare Wastes arise from human and animal healthcare, i.e. from hospitals, GP surgeries, dental surgeries, veterinary surgeries etc. and have identified European Waste Catalogue (EWC) codes.

Not all healthcare wastes are clinical wastes.

A national colour-coded healthcare waste segregation system has been published by the Department of Health and Social Care, see reference 12. This system is considered best practice and should ensure, at a minimum, that you comply with the current regulations.

The segregation system identifies and segregates waste on the basis of:

- Waste classification
- Suitability of treatment and disposal options.

You must ensure that the waste facility you send your waste to holds the appropriate authorisation, permit or licence for the type of waste that you send to be treated or disposed of. If you are in **Northern Ireland** or **Scotland**, you can check using the waste site directories on the NetRegs website (See website list).

For segregation systems to be effective, you must provide staff with:

- background information and reasons for segregation
- appropriate equipment, such as sufficient colour coded waste receptacles
- clear instruction and training.

You need to provide clear information, instruction, and training on categorising waste to everyone working in areas where healthcare waste arises. For example, you could display posters showing the different waste streams and types of waste at appropriate locations.

Clinical Waste

Clinical waste is the term used to describe medical waste produced from healthcare and similar activities that may pose a risk of infection.

Clinical waste can be hazardous to anyone who comes into contact with it. Clinical waste may contain:

- human or animal tissue
- blood or other body fluids
- excretions
- drugs or other pharmaceutical products
- used swabs or dressings
- used syringes, needles or other sharp instruments.

Clinical waste also includes any other waste that could pose a risk of infection and may be produced by:

- medical, nursing, dental, veterinary, pharmaceutical or similar practices
- investigation, treatment, care, teaching or research
- collecting blood for transfusion.

Clinical waste can be a health risk to anyone who comes into contact with it. It can be treated to be made safe.



Types of clinical wastes

Pharmaceutical hazardous/special (Cytotoxic and Cytostatic) waste - Cytotoxic substances are harmful to cell structure and function and can kill cells. Cytostatic substances prevent or limit cell growth. When disposing of cytotoxic and cytostatic waste you must comply with the hazardous/special waste regulations. – See section 5.2.2

Pharmaceutical non-hazardous/special (Non-Cytotoxic and Non-Cytostatic) waste – Non-Cytotoxic and Non-Cytostatic wastes are not deemed hazardous. You must ensure that you comply with your duty of care for waste – See section 5.1

Animals - If your clinical waste includes dead animals, or parts of animals, you will also need to comply with animal by-products controls.

Radioactive substances - If your clinical waste contains radioactive substances or is contaminated by radioactive materials you must have the correct authorisation from your environmental regulator and comply with the radioactive substances and wastes regulations.

Radioactive materials are often used in diagnostic medical imaging and cancer treatments.

If you deal with clinical waste you must ensure that you comply with your duty of care for waste, see section 5.1.

When dealing with clinical waste:

- you must separate clinical waste and non-clinical waste.
You should assess each type of material for hazards before you segregate it, and dispose of it correctly.
- you should research alternative materials and practices to reduce clinical waste.
- you should consider the management options for your clinical waste. For example, you may be able to send it to an energy-from-waste plant.
- you must ensure that clinical waste is stored and transported in **suitable containers**. Regularly check that storage containers are intact and that there is no risk of pollution.
- you must label containers adequately and securely with the name of the producer and source of the clinical waste.

Treat clinical waste as hazardous/special waste

All clinical waste is hazardous/special waste with two exceptions:

- medicines that are NOT cytotoxic or cytostatic.
- clinical wastes from municipal sources that are NOT associated with healthcare (for example needles and swabs from cosmetic body art or piercing).

If you produce store or transport most types of clinical waste you must comply with the hazardous/special waste regulations – See section 5.2.2

Keep records of your clinical waste

You must track your clinical waste and keep records of when you receive and dispose of it. You will usually need to complete hazardous / special waste consignment notes.

You could track your waste using:

- a service delivery note signed by the haulage business that took your waste, with details of the type and quantity of containers collected and the date of the next proposed collection.
- a waste acceptance record sheet signed by the driver and the waste site operator, with details of the type, quantity and weight of waste delivered.
- a certificate of safe destruction signed by the treatment or disposal operator with details of when your waste was processed, the quantity and description of the waste.

Use authorised carriers and facilities

Your waste carrier must transfer your clinical waste to a facility authorised to accept it. The facility must hold either:

- pollution prevention and control permit
- waste management licence or exemption.

If you transport your own waste, you must take it to a site that is authorised to accept it.

If you use a waste carrier you must check that they and the facility they take your waste to are authorised to handle clinical waste. Ask to see proof of authorisation and keep this for your records. Businesses in **Scotland** and **Northern Ireland** can check using the waste site directories on the NetRegs website (See website list).

Checking that your waste is taken to an authorised site is a good way to show that you have taken all reasonable steps to ensure your waste is being handled and disposed of legally.

5.2.2 Other (non-clinical) special/hazardous wastes

Waste is considered to be hazardous when it might be harmful to human health or the environment. Examples of waste with hazardous properties include:

- dental amalgam
- X-ray fixer and developer

- Healthcare chemicals with hazardous properties
- batteries (particularly those containing lead or mercury)
- waste electrical equipment which contains potentially harmful components.

If you produce waste with hazardous properties you must comply with legal obligations that control how you store, transport, treat and dispose of it.

If you keep hazardous/special waste on your premises, even for a short period of time, you must:

- ensure that it is stored safely and securely to prevent pollution
- ensure that it is packaged and labelled correctly
- keep different types of hazardous/special waste separate, and keep hazardous/special wastes separate from non-hazardous waste
- keep liquid hazardous/special waste in a dedicated area, with a bund or barrier to contain spills and leaks
- regularly check storage areas for leaks, deteriorating containers or other potential risks.

For more information on hazardous/special waste requirements, for businesses in **Scotland** and **Northern Ireland**, visit the NetRegs website (see website list).

5.2.3 Source-segregated recyclates

In **Scotland** and **Northern Ireland** you must segregate key recyclates for separate collection. Key recyclates are plastics, metal, glass, paper and card/cardboard.

When dealing with any waste you must follow the Duty of Care Regulations - See section 5.1

5.2.4 Food waste

There are regulations covering the disposal of food waste generated at healthcare establishments, such as hospitals and nursing homes.

If you produce food waste, you must present this for separate collection.

You are exempt from the regulations only if:

- you produce less than 5kg of food waste per week
- you deal with catering waste from international transport (Category 1 animal by-products) where existing controls still apply.
- And, in **Scotland** if your premises are located in a rural area,

In **Scotland**, the use of macerators to dispose of food waste in the sewer system is banned, except for domestic premises and food producers in rural areas.

In **Northern Ireland**, the use of macerators is banned and a further duty is imposed on any person who produces food waste to ensure that such waste is not deposited in any lateral drain or public sewer, or drain or sewer connecting to it.

Fats, oils and grease

You must not dispose of used cooking oil with the rest of your food waste.

It is also important that fats, oils and grease are not disposed of down sinks and into drains as this will likely cause blockages. If they are disposed of carelessly and blockages occur, your sewerage provider will seek to recover the costs of clearing the blockage and may result in a criminal prosecution. See reference 13.

If you produce waste oils and grease, you must:

- store it properly using oil containers that are strong enough and that are unlikely to burst or leak during ordinary use;
- store containers within a secondary containment system (SCS), such as a drip tray, bund, or any other suitable system, which will contain any oil that escapes from its container;
- ensure that only an authorised waste carrier collects your waste and takes it to an authorised site for recovery or disposal.

5.2.5 WEEE

If your business bought EEE before 13 August 2005, the waste is known as 'historic WEEE'.

If you are replacing the equipment, the producer of the replacement equipment must take your unwanted item if you request it, even if they are not the original manufacturer.

If you're not replacing the equipment, you need to make sure the WEEE is disposed of in accordance with the duty of care and hazardous waste legislation – See section 5.1

If your business bought equipment after 13 August 2005, the waste is known as 'non-historic WEEE' or "new WEEE". A bar underneath the crossed-out wheeled bin symbol indicates that the WEEE is non-historic. The EEE producer is responsible for financing the treatment, reprocessing and disposal of the equipment unless both parties agree to an alternative arrangement. You should contact them to find out what arrangements are in place.

If you agree with a producer to make your own arrangements to deal with WEEE, you must make sure it is treated, recycled, recovered and disposed of correctly.

If your business rents or leases EEE the organisation that provides the equipment will normally be responsible for disposing of it.

When you buy new EEE you should keep the WEEE registration number of the equipment producer. Use this to contact the producer when you need to dispose of the products. The producer's compliance scheme is responsible for the WEEE. The original producer can give you information on the take-back system available to you.

Your EEE suppliers and retailers can dispose of business WEEE for you, but they may charge you for this service.

If the EEE producer refuses to take responsibility for your waste:

- In **Northern Ireland** contact the Northern Ireland Environment Agency (NIEA)
- In **Scotland** contact the Scottish Environment Protection Agency (SEPA)
- In **Wales** contact Natural Resources Wales (NRW)

5.2.6 Residual waste – domestic/municipal/landfill waste

Domestic type waste or mixed municipal waste from healthcare premises is similar to waste from domestic households. For example:

- newspapers, magazines and office papers
- sandwich wrappers
- drinks cans

Waste from healthcare premises containing items such as nappies and incontinence pads are classed as offensive waste.

Domestic type waste from healthcare premises does not include:

- sharps chemicals medicines
- dental amalgam
- anatomical waste, e.g. body parts, organs or blood
- dressings and protective clothing, e.g. masks, gowns and gloves
- hygiene waste and sanitary protection, e.g. nappies and incontinence pads
- wastes contaminated with any body fluids
- personal or healthcare aerosols that are hazardous waste
- hand gel containers or dispensers (unless emptied and cleaned)
- fluorescent tubes
- any hazardous waste.

You should ensure that you thoroughly segregate your waste at source. If any of the above are present in the waste, it is not classed as domestic type waste.

Domestic type waste is classified as non-hazardous waste.

You must complete waste transfer notes for any waste that leaves your site. You must keep copies of all waste transfer notes for two years.

You must ensure that your waste is stored, handled, recycled or disposed of safely and legally. You must comply with your waste duty of care. See section 5.1.

You can dispose of refuse sacks by either non-hazardous landfill or waste incineration.

You should recycle as much of your domestic type waste as you can.

5.2.7 Pharmaceutical waste

Pharmaceutical waste includes:

- waste medicines
- packaging contaminated with medicines
- items used to handle and administer medicines, eg medicine-contaminated syringe bodies.

For cytotoxic and cytostatic medicines, and items that are contaminated by them, see the guidance for cytotoxic and cytostatic waste. Cytotoxic and cytostatic medicines are medicines that are either: toxic, carcinogenic, mutagenic or toxic for reproduction.

Disposing of pharmaceutical waste

Waste drugs and other pharmaceutical products that, unless made safe, could be hazardous to anyone who comes into contact with them are classified as clinical waste.

Pharmaceutical waste must be made safe.

You must complete waste transfer notes for any non-hazardous waste that leaves your site. You must keep copies of all waste transfer notes for two years. Consignment notes will be required for the transfer of hazardous waste.

You must ensure that your waste is stored, handled, recycled or disposed of safely and legally. You must comply with your waste responsibilities, known as your duty of care. See section 5.1

In **Northern Ireland**, pharmaceutical waste must be made safe by clinical waste incineration at an authorised incinerator.

In **Scotland**, pharmaceutical waste which is classed as cytotoxic or cytostatic must be disposed of by clinical waste incineration at an authorised incinerator. Other pharmaceutical waste can be made safe either by clinical waste incineration or by other appropriate methods.

Containers for pharmaceutical waste

Place all pharmaceutical waste in rigid leak-proof containers.

Store liquid wastes separately in appropriate individual leak-proof containers to prevent mixing.

Your containers should be clearly labelled by the manufacturer to identify that they are suitable for and contain pharmaceutical waste.

Your waste contractor should be able to advise or supply you with a container that meets the relevant requirements.

Reducing pharmaceutical waste

You can reduce the amount of pharmaceutical waste by:

- Maximising the use of Patients own drugs (PODs) during inpatient stays by encouraging patients to bring their medicines into hospital and ensuring they are used correctly.
- Prescribing starter packs for new medicines
- Prescribing the smallest package possible and giving refills as needed.
- Prescribing preventative measures and non-medicinal therapy where possible.
- Prescribing antibiotics sensibly and carefully.
- Supporting take back schemes for pharmaceuticals.

For further information on reducing pharmaceutical waste, see reference 14.

5.3 Waste treatment and disposal systems.

5.3.1 Rendering waste safe

All treatment and disposal facilities for healthcare waste require the waste to be made safe.

Making the waste safe depends on:

- The type of waste
- The nature of the contaminants present in the waste.

To be 'rendered safe' you must be able to:

- Reduce the number of infectious organisms present in the waste to a level that no additional precautions are needed to protect against infection by the waste;
- Destroy waste so that it is generally unrecognisable (e.g. to ensure that no confidential information is visible and/or that the waste does not cause offense when viewed);
- Renders sharps unusable and longer in their original shape or form;
- Destroys the component chemicals of medicinal waste.

5.3.2 Waste treatment and disposal options

The most common waste treatment methods for healthcare wastes are:

- Alternative (non-burn/low temperature) treatment
- High temperature (incineration/combustions processes) treatment

Alternative (non-burn/low temperature) treatment

There are several types of Alternative treatment (AT) methods available for the treatment of healthcare waste. The most common types of AT for healthcare wastes include:

- Heat thermal disinfection systems
- Autoclaves
- Steam auger
- Dry heat
- Microwaves
- Chemical systems

High temperature (incineration/combustions processes) treatment

Incineration is the most commonly used high temperature treatment for infectious waste but, other technologies exist including pyrolysis, plasma technology and gasification.

In most circumstances you will need a pollution prevention and control (PPC) permit or waste management licence or a registered waste exemption for burning waste. Make sure that you have the correct permits, licences or exemptions in place before you burn waste.

Discharge to sewer

See section 2.2 - Trade effluent.

Landfill

Landfill is the disposal of waste into or onto land in a carefully controlled manner in line with authorisation from the Environmental Regulator. Infectious waste is banned from landfill. Non-infectious offensive waste may be disposed of directly to landfill, as well as residual municipal waste (black/clear bag) that cannot be recycled.

For further information on waste treatment and disposal systems, in **Wales** see reference 15, in **Scotland** see reference 16.



Section 6. Oil and chemical storage

6.1 Oil storage

All oil storage tanks must have secondary containment, either with the primary tank enclosed in a second outer tank (integrally bunded) or in the form of an impermeable bund surrounding the tank. The tank must be strong enough not to leak in ordinary use and located away from any surface water drains. The regulations require that attention is paid to the construction and condition of the tank, the siting of tanks, the capacity of secondary containment, the ancillary pipework and safety devices.

Oil storage regulations apply to all parts of the UK and cover most types of oil stored on business premises. In **Wales**, all new domestic oil storage tanks are covered by the regulations, while only those with a capacity greater than 3500 litres in England and **Northern Ireland** and greater than 2500 litres in **Scotland** are included.

All oil stored in containers with a capacity greater than 200 litres is covered by the particular Oil Storage Regulations that apply to each country. In **Scotland** oil containers, holding less than 200 litres must be durable and fit for purpose. In **Northern Ireland** and **Wales**, this should be followed as good practice to reduce the risk of pollution. In addition, containers with a capacity less than 200 litres should be stored within secondary containment, or on a drip tray, to prevent the escape of pollutants. (See reference 1: GPP 2 - Above Ground Oil Storage)

6.2 Storage of chemicals

You must store any chemical in a suitable container that is:

- sealed securely to prevent spills
- resistant to the effects of the content
- strong enough to cope with handling.

You can check the chemical's safety data sheet (SDS) to see what its properties are. The SDS contains information about the chemical, including details of how to store, use and dispose of it safely. (See reference 17 – HSE: Hazard pictograms) The SDS will also make it clear which chemicals you must keep separate, to prevent a spill causing a reaction.

Store chemicals on bunded shelves, in bunded cabinets, or in a bunded chemical store that is sited well away from any drains. Make sure that liquid spills cannot enter drains, surface water or groundwater. A spill kit should be kept on site to clean up any spills quickly.

The bund or drip tray should be big enough to contain any spills and made of a suitable material for the chemical you are storing. For example, you may not be able to use a polyethylene container to store corrosive chemicals.

Store flammable chemicals safely

Store flammable chemicals in a fire-proof steel cabinet or chemical storage cupboard. If you store lots of flammables, you may need to keep them in a designated room.

Keep information and implement safety precautions

You should keep an inventory of the chemicals you have on site, and details of when you received them and when you should dispose of them if you do not use them up.

Prevent vandalism of chemical stores

You are responsible for all chemicals on your site such as, pesticides, disinfectants, or medicines. You can be prosecuted for a pollution incident that originates on your site even if it was caused by intruders.

Use lockable storage units and keep chemicals locked away if possible when they are not in use.

Prevent pollution from spills

Ensure that you have a spill kit on site which contains absorbent materials - e.g. sand which is suitable for the type and quantity of chemicals you store and use on your site. Keep them close to where you might need them and make sure that staff know when and how to use them.

(See reference 2: GPP 21 - Pollution Incident Response Planning)

6.3 Storage of Medicines

All medicines should be stored in accordance with manufacturers' recommendations, which will be clearly stated on the packaging. Make a note of expiry dates and check how long medicines can be used after opening.

Keep medicines in a secure, preferably locked, cabinet and make sure that access is limited to staff who know how to administer them.



**NEVER DISPOSE
OF MEDICINES IN
GENERAL WASTE OR
FLUSH THEM AWAY**

Section 7. Energy efficiency

Energy use in the healthcare sector is growing steadily. However, much of this energy is wasted. Reducing energy use is an easy way to cut costs.

For healthcare, the key areas to reduce energy use are:

- Heating – Avoid unnecessary heating. Just 1 degree of overheating can increase fuel bills by up to 8%.
- Ventilation – Unnecessary ventilation can waste energy.
- Energy management - get buy-in for energy saving across all levels of the organisation, from appointing an energy manager and monitoring energy use, to developing an action plan and training staff.
- Minimising hot water waste from shower and hand washing

For further information on energy efficiency in the healthcare sector, see reference 18: Carbon Trust: Primary healthcare sector overview (CTV025).

Section 8. Nuisances

A nuisance can be any action or failure to act, which interferes with people's use and enjoyment of land or property, or that could have a negative effect on health.

Causes of nuisances may include:

- noise
- odour
- smoke
- artificial lighting
- pathogens

If you cause but fail to deal with a nuisance, you could face legal action and a fine. Your local council could restrict or stop your activities.

If you have a permit, licence or exemption and you breach noise, odour or other conditions your environmental regulator or, in Northern Ireland, your district council can take enforcement action against you.

For more information on nuisances visit the NetRegs website (**Scotland** and **Northern Ireland**), see website list.

Section 9. Sustainable procurement

Health facilities use a wide variety of products, including pharmaceuticals, medical and building supplies, and foods. Procurement activities that promote the use of efficient materials, reduce waste, and prioritise products with low carbon footprints can create cost savings and environmental and health benefits.

Pharmaceutical and chemical procurement - Identify sustainable products that are produced in an energy-efficient manner. Good stock control e.g. only ordering the quantities required can reduce wastage.

Medical instrument procurement - Where possible consider the sterilisation and reuse of medical materials as an alternative to single-use devices/instruments.

Food – Identify healthy and sustainable food products, minimise food waste, and source local produce.

For more information on sustainable procurement in the healthcare sector, see WHO Sustainable procurement in healthcare, reference 19 and Healthcare without harm – Sustainable procurement, reference 20.

Section 10. Transport

Health facilities should minimise the impacts of transport on existing and new sites by:

- considering the location and accessibility to the facility;
- promoting active or public transport alternatives or car sharing for staff;
- increasing the amount of information and advice available without the need to visit healthcare facilities e.g. over-the-telephone or internet advice.

For more information on minimising the impacts of transport from healthcare facilities, see reference 21: Green and healthy hospitals: Transportation and reference 22: WHO Transportation.



Section 11. Biodiversity/Nature conservation

There is a legal duty on all public bodies to further the conservation of biodiversity as they carry out their work. This means public bodies must reduce any negative effects on biodiversity, and look for ways of improving biodiversity in their day-to-day business.

Good management of biodiversity can also bring a range of health benefits. Areas rich in plant and animal life are a key resource for physical activity by patients, staff visitors and the local community.

Other health related benefits from biodiversity/nature conservation include:

- faster recovery from mental fatigue,
- less stress,
- better quality of life, and
- lower risk of mortality.

(Maller et al., 2005, Reference 23).

For more information on biodiversity/nature conservation, visit the NHS forest website (see website list) and the Biodiversity section on the WHO website (see website list).



Section 12. Climate change adaptation

According to the World Health Organisation (WHO), climate change has a range of health impacts, including:

- temperature-related illness and death,
- injuries and illnesses due to extreme weather events,
- the spread of infectious diseases,
- increases in water borne illnesses, and
- wide-ranging impacts from air and water pollution.

The World Health Organisation estimates that climate change is already contributing to 150,000 deaths per year.

Climate change adaptation is the process of:

- Dealing with current changes
- Preparing for future changes

Adaptation is an ongoing process. There will be considerable local variations and there is no final 'adapted state'.



Figure 9. Key steps for climate change adaptation.

Detailed risk assessments have been carried out, and both the Northern Ireland Assembly and the Scottish Government have developed Climate Change Adaptation Programmes. Areas where action may be required include the fabric of buildings, flood risk, transport, and heating or cooling in your buildings.

Figure 9. identifies the key steps for climate change adaptation. These involve

1. Getting started
2. Understand the impacts of climate change
3. Identify and prioritise actions
4. Take action
5. Monitor, review and evaluate.

You can get information and practical help, and view case studies and good practice in:

- **Northern Ireland**, by visiting the [Climate Northern Ireland website](#), see website list.
- **Scotland**, by visiting the [Adaptation Scotland website](#), see website list.

Defra has published Climate Change Risk Assessments for Northern Ireland and Scotland, please see the risk assessments in references 24 and 25.

Section 13. Incident response

Incident Hotline Numbers:

In **Scotland, Northern Ireland and England** call:

0800 80 70 60

(24 hour service)

In **Wales** call:

0300 065 3000

(Press 1 for 24 hour service)

You should immediately report any environmental incidents by calling the Incident Hotline for your country.

Incidents can include spillages (e.g. from oils and chemicals), contaminated surface water run-off, flooding, riverbed disturbance, damage to underground services, damage to habitats and poor waste disposal and storage. If in doubt, report it.

You should produce an Incident Response Plan as part of the environmental impact management of your work. Include the following:

- site risks
- list of key external and internal contacts (include your environmental regulator, Local Authority, Fire Service)
- reporting procedures
- site plan including drainage and location of storage/refuelling areas
- list of stored materials
- details of local environmental sensitivities e.g. abstractors, high amenity areas and fish farms
- location of spill equipment
- procedures for spill containment and remediation

Train your staff and contractors in the use of spill equipment and how to manage and dispose of waste materials legally.

If you are using oils and chemicals in close proximity to the water environment, store a suitable spill kit or absorbent materials nearby. Provide appropriate temporary storage for any oils and chemicals. Contain all spillages using absorbents such as sand, soil or commercially available booms or pads and notify the environmental regulator immediately, using the Incident Hotline numbers above.

For further information on incident response see GPP21 Pollution incident response planning, reference 2.

Glossary

Animal husbandry	The science of breeding and caring for animals.
Antimicrobial resistance	Antimicrobial resistance (AMR) is when microorganisms that cause infection survive exposure to a medicine that would normally kill them or stop their growth
Aquatic life	Animal or plant that lives or grows in water.
Aquifers	A body of permeable rock which can contain or transmit groundwater.
Autoclave	A strong heated container used for chemical reactions.
Biological treatment	A type of treatment that uses substances made from living organisms to treat disease.
Biosecurity	Measures that are taken to stop the spread or introduction of harmful organisms to human, animal or plant life.
Bund	An embankment or causeway e.g. a wall surrounding an oil/fuel tank.
Chemotherapy	The treatment of disease by the use of chemical substances, especially the treatment of cancer by cytotoxic and other drugs.
Clean, uncontaminated water	Water which is free from any contamination, for example uncontaminated could include rainwater directly from roofs. Even if the water looks clear it may still be contaminated with e.g. chemicals, so it is essential the sources of runoff are considered carefully when checking whether water is contaminated or not.
Clinician	A doctor having direct contact with patients.
Climate change	Significant changes in global temperature, precipitation, wind patterns and other measures of climate that occur over several decades or longer.
Combined drains/sewers	Sewers or drains that collect both foul sewage and surface water run-off and carries it safely to a sewage treatment facility. Either owned privately or by the local water and sewerage provider.
Containment	The action of keeping something harmful under control or within limits
Discharge	Release of water into the water environment or drainage/sewer systems.

Dry heat treatment	Thermal treatment using electrically generated heated air, oil or molten plastic to inactivate potentially harmful micro-organisms.
Duty of Care	A legal obligation to take reasonable care and avoid causing damage.
Formal approval	In this document refers to the authorisation(s) you may need from the environmental regulator. They may be called a consent, licence or permit.
Gasification	A technology that converts waste into synthetic gas which can be used in various ways e.g. to produce electricity.
Groundwater	All water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
Hazardous material	Hazardous materials are those with toxic properties that damage the environment and / or affect human health
Hazardous/Special waste	Waste that is harmful to human health or the environment. For specific legal definitions including special waste in Scotland.
Heat thermal disinfection systems	A system of heating the waste to a fixed temperature for a specified time to deactivate the infectious elements in the waste.
Impermeable	A surface or material that liquid cannot pass through.
Incineration	A form of waste disposal where waste is burned.
Infectious	A disease (or disease causing micro-organism) that can be passed on to people, organisms, etc. through the environment.
Micro-organism	A microscopic individual living thing
Microwave	Electromagnetic waves with a frequency between radio waves and infrared waves. Used to heat waste and cause thermal inactivation of the potentially harmful micro-organisms.
Organism	An individual living thing.
Pharmaceuticals	Medicines or drugs used in human or animal healthcare.

Plasma technology	In a plasma system, an electric current is discharged through an inert gas (for example argon) to ionise it and in turn cause an electric arc to create temperatures as high as 6000°C.
Pyrolysis	Pyrolysis involves the high temperature treatment of waste in the absence of oxygen.
Renal dialysis	Dialysis is a procedure to remove waste products and excess fluid from the blood when the kidneys stop working properly
Secondary containment	This is another container in which a primary container is located. It is impermeable to the product being stored and water, and designed to catch spills, leaks or overflows from the container (including its pipework and equipment) in everyday use, accidents and emergencies. Secondary containment is essential to prevent pollution. Bunds and drip trays are examples of secondary containment.
Steam auger	An industrial thermal disinfection process that operates at atmospheric pressure using a combination of time and temperature to treat the waste and make it safe. Waste is shredded prior to its entry into a steam auger where it is turned and treated with steam.
Surface waters	Water bodies including rivers, lakes, lochs, loughs, reservoirs, ponds, streams, canals, ditches (including those that are temporarily dry), estuaries and coastal waters up to three miles offshore. Northern Ireland legislation defines these as 'waterways'.
Trade Effluent	Trade effluent is any liquid waste (effluent) discharged from premises being used for a business, trade or industry.

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Website list

NetRegs - Guidance on environmental regulations for businesses in Scotland and Northern Ireland

www.netregs.org.uk

Scottish Environment Protection Agency (SEPA) website

www.sepa.org.uk

Natural Resource Wales

www.naturalresources.wales

Welsh Government

www.gov.wales

Department of Agriculture, Environment and Rural Affairs Northern Ireland

www.daera-ni.gov.uk

Northern Ireland Water (formerly Water Service) - is the sole provider of water and sewerage services in Northern Ireland.

www.niwater.com

WRAPNI (Waste & Resources Action Programme) - provides structured information and support to businesses to help them achieve water efficiency savings in Northern Ireland.

www.wrapni.org.uk

Resource Efficient Scotland - provides structured information and support to businesses to help them achieve water efficiency savings in Scotland.

www.resourceefficientscotland.com

Waterwise - has information on how to develop a water efficiency plan

<https://waterwise.org.uk>

Welsh Water/Dŵr Cymru - has information on how to carry out a water efficiency survey of your activities

www.dwrcymru.com

NHS Forest - is a project coordinated by the Centre for Sustainable Healthcare.

<https://nhsforest.org/>

WHO: Biodiversity

<https://www.who.int/globalchange/ecosystems/biodiversity/en/>

Further information

For information about environmental compliance, or to report inconsistencies or inaccuracies in this guidance, visit www.netregs.org.uk.

You can view guidance on environmental regulations online at www.netregs.org.uk (for businesses in Scotland and Northern Ireland) and at <http://naturalresources.wales> (for businesses in Wales).

This guidance is issued by the Scottish Environment Protection Agency (SEPA) and the Northern Ireland Environment Agency (NIEA).

This document is available at www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/.

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Useful contacts

Incident/Pollution hotline: Northern Ireland, Scotland and England

0800 80 70 60 (24-hour service)

Emergency hotline - Wales

0300 065 3000 (press 1 – 24-hour service)

Floodline – Wales, Scotland and England

0845 988 1188

Flooding incident line - Northern Ireland

0300 200 0100

Natural Resources Wales

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