



BEST PRACTICE GUIDE

Healthcare Risk Waste Reduction



This Best Practice Guide outlines actions to reduce the quantity of non-risk waste disposed of as healthcare risk waste. The information has been gathered through work undertaken with a number of Green Healthcare Programme hospitals, who have been observed to operate best practice measures.

Can you reduce the quantity of healthcare risk waste generated in your hospital?

The correct management of healthcare risk waste minimises the risk of the spread of infection. Consequently, healthcare risk waste is sterilised or incinerated when disposed of, at a much higher cost than that for landfilling the waste.

Healthcare risk waste bags were characterised in a number of Irish acute healthcare facilities which participated in the Green Healthcare Programme. These surveys found, that on average, **19%** of the healthcare risk waste bags was obvious non-risk material (packaging and non-clinical items). An additional **15%** of the bags was comprised of materials, which were uncontaminated, and may not be healthcare risk waste.

Simply put, your facility can reduce the quantity of healthcare risk waste it generates, by avoiding non-risk waste being incorrectly placed in the healthcare risk waste stream.

What is healthcare risk waste (HCRW)?

Healthcare risk waste is waste from healthcare facilities, which poses a risk due to its potentially infectious nature.

It includes wastes such as sharps, anatomical waste, blood, and items contaminated with blood or other bodily fluids (excluding faeces & urine). Cytotoxic drugs (used in cancer treatment) or other pharmaceuticals are also handled as healthcare risk waste.

Healthcare risk waste is generated in the treatment of patients isolated with infectious or transmissible conditions.

Healthcare risk waste is also generated in the everyday treatment of patients e.g. dressings, alcohol wipes, tissues, etc, that are contaminated with blood or other bodily fluids.





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BEST PRACTICE: Important FIRST steps, to reduce the quantity of non-risk waste incorrectly placed in the healthcare risk waste stream

STEP 1: Review your facility's healthcare risk waste classification policy

In conjunction with infection control, consider reviewing what your facility classifies as clinical risk waste.

This is particularly the case for waste generated in isolation rooms (see overleaf). Examples of materials that are often automatically classified as healthcare risk waste include incontinence wear, clean gloves and clean table or stand covers.

STEP 2: Ensure staff know what is and is not healthcare risk waste

It might sound obvious, but ensure that staff are aware of what should be disposed of as healthcare risk waste.

Regular training is essential to keep staff up-to-date with any changes to the classification of healthcare risk waste. Training of new staff on segregation policies is essential, and should include important information, such as the large cost difference between disposing of waste as healthcare risk waste and general landfill waste (see graph below).

STEP 3: Remove healthcare risk waste (HCRW) bins from public access areas e.g. multi-bed wards

In the main, patients and visitors are not aware of the difference between healthcare risk waste and general landfill waste - particularly in terms of the significant disposal cost differential. Consequently, they may incorrectly dispose of waste in the HCRW bin. This has been observed in surveys undertaken in healthcare facilities.

Removing HCRW bins from public areas of wards and confining them to utility rooms, eliminates the potential for misuse, and also limits the number of areas where healthcare risk waste is stored.



Empty, everyday medication containers, incorrectly disposed of in a healthcare risk waste bin in a PCCC facility (community hospital)

Best practice for the provision of healthcare risk waste bins

In each area, consider:

Is a healthcare risk waste (HCRW) bin actually required?

If little or no healthcare risk waste is generated in an area, then consider not providing a HCRW bin (yellow bin).

Any healthcare risk waste generated can be disposed of in a HCRW bin in a nearby area.

Try not to consider 'just in case' scenarios. For example, don't provide a HCRW bin, if healthcare risk waste is to be disposed of only every so often.

Provide the right sized bin

Where a HCRW bin is needed, but only small quantities are generated, then a smaller bin (e.g. 20 litres) may be sufficient instead of the standard 70 litre bin.

Cleaning procedures require bins to be emptied on a regular basis, regardless of how full the bags are. Due to hygiene and visual reasons, staff are unlikely to overfill bins, and are more likely to place bulky non-risk packaging in another bin, rather than filling up a small HCRW bin.

Typical costs for different waste disposal routes (€/tonne, 2012)



Reusable waste bins for sharps, liquids and wet waste

In the majority of healthcare facilities, disposable rigid plastic bins are used for the disposal of sharps (sharps bins) and liquid and wet waste (rigid bins fitted with absorbent material). The plastic bins, which are sealed in the ward or medical area for safety, are disposed of with the contents.

The clinical waste contractor has recently introduced reusable rigid waste bins to a limited number of healthcare facilities. These waste bins are managed and removed from the medical areas by waste contractor staff. The bins are brought to the waste contractor's facility, where they are emptied, sterilised and returned for reuse in the healthcare facility. This reduces the number of rigid waste bins disposed of as healthcare risk waste.

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Place the healthcare risk waste (HCRW) bin in the right location

The position of the HCRW bin in the room, and in relation to other bins is important. Specific observations apply, as outlined below:

DO PLACE THE HCRW BIN

Next to a general landfill waste or recycling bin. Staff have to make a decision on which bin to use. Make sure to place the general landfill or recycling bin closer to the main source of waste generation.

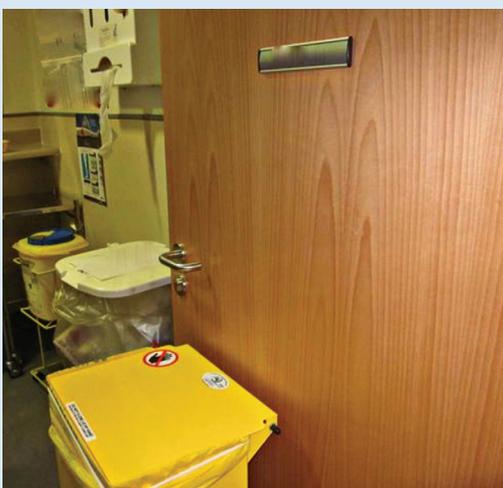
DO NOT PLACE THE HCRW BIN

Next to a hand wash sink as paper towels are usually thrown into the nearest bin, whether it is the correct bin or not. Place a general landfill bin or recycling bin next to the sink instead.

Near the entrance to a room, especially where the door is continually open - it may be used by someone in the corridor. This does not apply in an isolation room, where the bin is used for the collection of PPE (gloves, gowns, aprons, etc).

For similar reasons do not use a HCRW bin as a door stop.

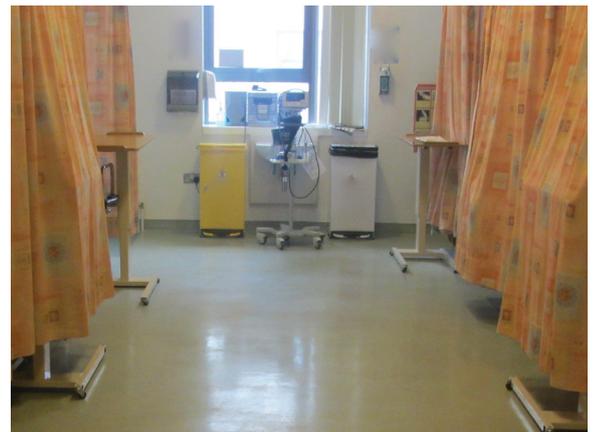
If retained in publicly accessible areas e.g. multi bed rooms, do not place within easy access of patient beds. Patients and visitors will generally place waste into the nearest bin.



Healthcare risk waste bin incorrectly used as a door stop.

Bin placement survey

Consider undertaking a waste bin placement survey, in the different areas in your facility to determine if the right bins are provided in the right location. Look inside the clinical bins - is all waste inside definitely clinical? See the **HOW TO: Undertake a waste bin placement survey guide for more information.**



Healthcare risk waste bin in a multi-bed public access ward. Non risk waste was observed in the bin. Best to remove to a staff only area.



See the **BEST PRACTICE: Healthcare Risk Waste Reduction in the Theatre** for more information on minimising healthcare risk waste in your theatre



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Keep stock levels low in isolation rooms

When a patient is discharged, a deep clean of the isolation room is undertaken. All disposable materials and supplies remaining in the room are generally disposed of as healthcare risk waste.

Stocking procedures should ensure that the minimum quantity or number of supplies is provided in isolation rooms. Ideally, all materials required by medical personnel should be brought into the isolation room on an 'as needed' basis.



Unopened, sealed disposable material disposed of as healthcare risk waste, following cleaning of isolation room.

Consider removing the HCRW bins from certain isolation rooms

Healthcare facilities could consider removing the HCRW bins from isolation rooms used for the isolation of patients with contact spread conditions (i.e. non droplet or airborne transmittable conditions).

All waste generated in the treatment of the patient e.g. dressings, wipes, tissues, etc. and all waste contaminated with blood or infectious body substances, is treated as HCRW as normal. Where gloves and aprons are contaminated with blood or bodily fluids they are also treated as HCRW. This HCRW is placed into a sealable small yellow waste bag and transferred to a HCRW bin in the ante-room or ward dirty utility room. This removes the need for a HCRW bin in the room.



All other waste generated in the isolation room is treated as regular landfill waste or recycling.

Review the classification of waste generated from isolation rooms

In most hospitals it is a common infection control policy to treat all waste generated in isolation rooms as healthcare risk waste. Even the clean waste generated by the patient (e.g. magazines, drink bottles, etc.) is treated as healthcare risk waste.

A significant number of patients isolated in hospitals have contact spread conditions (i.e. non droplet or airborne transmittable conditions). Thus the patient's own waste would pose minimal risk in the spread of the infection. The healthcare facility should consider treating this waste as regular landfill waste or recycling.

Recently published guidance documents on the Health Protection Surveillance Centre website regarding the diagnosis, prevention and control of particular infectious conditions make reference to this. For example in the "Guidelines for Control and Prevention of Multi-Drug Resistant organisms (MDRO) Excluding MRSA in the Healthcare Setting" it states "The majority of waste from a room where a patient has a MDRO should be considered non-risk waste e.g. gloves and aprons, unless contaminated with blood or infectious body substances."

The facility should consider adding a landfill waste bin to the isolation room to collect the large volume of non-risk waste generated in the room.

A number of facilities in the Green Healthcare Programme reviewed their healthcare risk waste classification policy for waste from isolation rooms. As a result, the quantity of healthcare risk waste generated was reduced, with no increase in the spread of infectious conditions.

For more information have a look at the **SVPH Healthcare Risk Waste Reduction Case Study** on the Green Healthcare website.



Just because waste is generated in a clinical area, does not automatically make it Healthcare Risk Waste!

