

Econological working is a key priority for the University Hospitals Leuven

Processing waste in a way that is as environmentally friendly as possible and at the lowest possible price. Each member of the chain in the hospital needs to be involved in order to achieve this. Is that actually possible? Herman Devriese (Head of the Prevention and Environment Service and Environmental Coordinator) and Els Marjaux (Environmental Adviser) explain how important this balance is for a large university hospital such as University Hospitals Leuven.



Herman Devriese
Head of the Prevention and Environment Service
and Environmental Coordinator

*In a hospital you are sometimes working under a lot of **time pressure**, in which case **waste sorting is not the first thing on your mind.***

As an environmental coordinator and an environmental adviser you are of course aware of the waste stream and of the importance of waste sorting, however the average hospital employee will not consider this to be the most important element of his or her job. How can you raise awareness of this issue amongst other personnel?

You yourselves are often faced with changes in the legislation. What have been the biggest changes for you in recent years?

Is in-house waste processing a viable alternative? If the hospital had its own autoclave it could convert HMW into NHMW as is already the case at some other hospitals.

*A waste container with Hazardous Medical Waste (HMW) that has not been sealed properly or that is leaking or a needle in a waste sack containing Non-Hazardous Medical Waste (NHMA) can present a **serious health risk** for a staff member at our household waste recovery centre.*

Marjaux: "Most people are indeed aware of the importance of waste sorting. People are also used to sorting their waste at home. In a hospital, however, the waste streams are much more complex than at home and you are often under time pressure. Patient care takes priority. In this case, waste sorting is not the first thing on your mind."

Devriese: "My pet saying is that we need to work 'econologically'. We need to process waste in a way that is as environmentally friendly as possible and at the lowest possible price. This has become increasingly difficult in recent times. Previously we assessed the risk associated with our waste ourselves and, according to the spirit of the law and taking into account the ecological impact and safety implications of waste processing, made our own distinction between what is and what is not hazardous. Under pressure from the government and accreditation schemes we now increasingly need to obey the letter of the law. This means that we are now able to recycle less and class less waste as non-hazardous, which makes it considerably more expensive."

Devriese: "These units are machines that homogenise and sterilise the HMW as part of one single system. By heating the HWM and reducing sharp items to very small pieces, you can create NHWM on site and you pay less for your waste. I am essentially in favour of this type of system, but I have my reservations. The principle is great, however there are many potential problems. To start with, you need to get your staff to sort waste more effectively. And to what extent can you trust everyone to adhere to the waste sorting rules at all times? What if, for instance, cytostatics end up in this specific waste stream? After all, chemical risks are not eliminated. Introducing a new system, including additional waste sorting rules, is no easy task. Another problem is that the shredder of an autoclave will occasionally become jammed by the materials that are fed into the system. How do you fix this? Manipulating this type of system to get it back up and running is not without its risks. Finally, the hospital must also have sufficient expertise at its disposal to continuously monitor the waste processing, and this is certainly not always the case now. To summarise, it sounds better than it is. We will therefore be looking further this year at what this type of investment could mean for us. What is the environmental impact, is it feasible from an organisational point of view, for which services could it offer a solution and which not? Our aim is to achieve an econologically feasible result that offers a balance between sustainability and financial impact."

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Devriese: "Care professionals are not always aware that incorrect waste sorting or incorrect waste packaging can have consequences for others. A waste container with Hazardous Medical Waste (HMW) that has not been sealed properly or that is leaking or a needle in a waste sack containing Non-Hazardous Medical Waste (NHMA) can present a serious health risk for a staff member at our household waste recovery centre. It is our job to make sure that people realise this."

Marjaux: "Hospital hygiene rules mean there is also an increasing tendency to replace reusable medical materials with disposal materials in hospitals. Disposal materials are now ubiquitous in hospitals. Medical disposables are often made from high-quality materials, which are all sent to the incinerator after use. That is a shame. New technologies also bring with them new materials, which sometimes means more complex waste. More complex waste to which the legislation has not always as yet been adapted. For example, medical waste that is too large to fit in a standard waste container for hazardous medical waste, and that cannot be disassembled without risk. Another example is back in 2015 when we had a problem because waste receptacles were not designed to contain waste from potential Ebola patients. In these situations we rang the alarm bell for the government and came up with a solution together with experts."

Marjaux: "We do this in many different ways. There is a waste handbook on the intranet containing all of the waste guidelines, and we have waste posters and a short animated film. We have a waste leaflet that people can quickly consult if they are not sure where their waste needs to go. We also provide employee training to people ranging from logistics staff to operating theatre personnel. It is important for us to keep providing people with the correct information and to teach them the waste guidelines."