

# Sluice Room Maintenance: Prevention Is Better Than Cure.





### Infection Control And The Sluice Room

In 2017, the UK invested £146m into medical research<sup>1</sup>, as part of a four-year push to become an international leader in life sciences. Already one of the country's chief sectors, medical care in Britain is amongst the safest and most innovative in the world; it may surprise you, therefore, to hear that an estimated 300,000 patients a year acquire a healthcare-associated infection as a result of care within England's NHS<sup>2</sup>.

A healthcare-associated infection (HCAI) refers to an infection that occurs as a result of contact with the healthcare system. This isn't an illness that one sought to cure, and therefore triggered a medical intervention; it's obtained via the medical intervention itself. This presents a pressing concern for medical facilities who seek to provide the best possible treatments, not induce additional recovery roadblocks.

HCAIs such as MRSA, clostridium difficile and norovirus are not only extremely unpleasant for the patient (often demonstrating sickness and diarrhoea symptoms) but can be fatal; especially in those who are already weak or immunosuppressed. After all, not many patients tend to enter medical facilities in the greatest of health.

In an attempt to tackle this pressing threat to patient wellbeing, NHS Standard Infection Prevention and Control Precautions have been published to provide a baseline standard for hygienic patient care. The guidelines attempt to instil good infection control habits, across a variety of nursing scenarios where bacteria is likely to spread; particularly in regard to moments for hand hygiene, which personal protective equipment to wear, safe use of medical devices, aseptic techniques and waste management.

As human waste is a vector for the bacteria which carries HCAls, its handling and safe disposal must be scrupulously monitored to prevent the spread of pathogens. NHS Standard Infection Prevention and Control Precautions highlight the need for UN-approved orange, yellow or 'tiger stripe' bags; these will clearly signify that their contents are an infection risk and should be dealt with accordingly. However, any method of bagging and binning potentially dangerous materials is far from ideal; not only can bags split and spill their contents, but they can also become over-filled, encourage the growth of germs on their outer surface, and even release bacteria into the air when a bag is opened to place another item inside.

The Precautions acknowledge that single-use items are by far the preference for safe management of human waste, but throwing them in a bin is not the intended way forward. Colour-coded bin bags will provide the most basic level of protection, but in order to truly protect your service users and clinicians, more advanced methods should be explored; and are readily available.

<sup>&</sup>lt;sup>2</sup> https://www.nice.org.uk/guidance/gs61/chapter/introduction







<sup>&</sup>lt;sup>1</sup> https://www.gov.uk/government/news/sir-john-bell-to-unveil-industry-led-proposals-to-build-uks-status-as-world-leader-in-life-sciences



### This Is Where Sluice Room Innovation Comes To The Fore.

The latest sluice room technologies, such as pulp macerators and bedpan washer disinfectors, will remove a great deal of the risk associated with manual handling of human waste. These advancements are critical to prevent the spread of infection and, due to their incredible effectiveness in regard to stemming HCAIs, facilities management should treat the service and maintenance of sluice room machinery as a priority.

The breakdown or poor maintenance of sluice room equipment will render their excellent benefits obsolete; they simply can't protect you or your service users if they're not operating to their full potential.

Budgeting for maintenance, as well as planning ahead, can prevent extremely costly consequences later down the line.

A robust maintenance strategy for your sluice room will not only protect those in your care but is likely to save you time and money. To truly understand why, you must first appreciate the benefits of your sluice room machinery, and how it could be disastrous to attempt to muddle along without it.

## What Would You Expect To Find In An Innovative Sluice Room?

Sluice rooms have been an integral part of hospital management ever since scientists made the connection that human waste is far from conducive to good health; particularly when it exits the body and becomes part of the environment.

The primary purpose of a sluice room is, therefore, to keep patients and their waste separate; particularly when using a normal toilet to dispose of waste isn't possible due to physical incapability or sickness.

However, removing human waste from a patient's immediate setting doesn't necessarily mean that they're kept safe from the germs that existed within it.

Let's think back to the 'bag and bin' method again – the human waste container was put in another container, potentially in a sluice room and away from the service user, but the bacteria could still travel; be that in the air, or on the skin.



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The aim of an innovative sluice room is to do away with these inefficient methods, and safely dispose of both the waste and any potential microorganisms that could find their way back to a human host.

For this reason, the vast majority of UK medical facilities have moved away from washing bedpans, commode pots and vomit bowls by hand. Washer disinfectors and pulp macerators are now the norm, with macerators in particular being used by the majority of hospitals as part of a single-use strategy.

A bedpan washer disinfector will, as the name suggests, wash and sanitise your medical utensils. This is achieved by thermal disinfection; the temperature of the steam generated is held at 80°C, coating the items inside the washer unit and ensuring that all bacteria is killed by the end of the cycle (which is usually only a minute long).

In the case of a macerator, bedpans and other disposable items which are made from medical pulp are placed inside an enclosed drum. The macerator then pulverises the items into a watery paste which is flushed through the regular sewerage system.

Both of these methods involve minimal touch with the machine and are designed to destroy 99.99% of all bacteria. It's no wonder that they've overtaken manual methods of disinfection, where thorough sanitation of the item is notoriously difficult to achieve.

When paired with an optimised sluice room layout, bedpan washers and pulp macerators will ensure that there's a clear flow between workstations and sanitising facilities, thus ensuring that none of the pathogens that make their way into a sluice room can find their way back out again.

Although this method is extremely effective, it relies on machine uptime, as well as clearly defined hygiene standards in order to remain a success; if your machines aren't used properly, or they are allowed to degenerate into disrepair, it's comparable to not having the machines at all.

# Why Is Machine Uptime Important?

If your sluice room machinery is damaged through misuse, or breaks down due to a lack of regular servicing, you will be dealing with more than mere inconvenience. Your patients will be at immediate risk.

Waste management is an essential part of care management because it simply never ceases. The people in your care will always produce waste; so, in the event of machine downtime, you are forced to find an alternative disposal method.

You have chosen to employ your sluice room machinery because you know it's the most sensible, sanitary and safe choice for your facility. If you no longer have access to this machinery then you are, by default, resorting to less effective methods – washing by hand, bagging and binning or (in truly





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unacceptable circumstances) allowing your filled waste vessels to stack up in the sluice room until the machinery can be fixed.



These ineffective methods will put both your clinicians and patients at risk, as bacteria start to spread with greater ease. Even if your facility has an alternative sluice room in another location with working machinery, it will invariably be a further distance from the clinician's ward. Even this extra travel is an infection hazard, as filled urine bottles, bedpans and vomit bowls are in the care environment for a longer period of time and pose a greater risk of spillages occurring or pathogens entering the atmosphere.

As a further consequence to these alternative methods, your clinicians will be forced to take more time dealing with sluice room tasks. From scrubbing bedpans, to walking across the facility to find a working washer disinfector, valuable time is wasted where it would normally be saved. Of course, your clinicians would rather be at the side of your patients — but with the one-minute cycle of their usual machinery no longer available, extra time must be spent on auxiliary tasks, in an attempt to ensure that infection control precautions continue

to be upheld, despite poor circumstances.

When your sluice room machinery experiences downtime, your clinicians will attempt to uphold infection control procedures as best they can. However, in the case of prolonged issues and heavy sluice room footfall, they are significantly less able to prevent the spread of infection.

Should care receivers fall ill – possibly as a result of technology failure – this will cause more than a heavy conscience for clinicians and management. The failure to keep good practices in place could result in a crisis for your reputation; and if the CQC inspectors pay a visit during the chaos, this information will be documented and made public.

Depending on how the situation is handled, machine downtime could have negative implications for your facility for months, or even years.

# Have Your Contingency Plan.

Very few machines can promise 100% efficiency – especially if users don't understand the importance of proper maintenance and suitable use. A contingency plan, which can be put into immediate effect, is essential – and should be common knowledge at the facility.





Whether you choose to clean bedpans by hand or to bag and bin, this process must be made as effective as possible for the time your washer disinfector or macerator is unavailable.

Stock of the necessary cleaning products must be a permanent feature of your sluice room inventory, even if you hope to never use them.

### Prevention Is Better Than Cure.

Waiting for machines to break down before you think of your contingency plan is perilous and demonstrates a stark disregard for crisis planning.

Even if you feel prepared to back up your infection control procedures with other methods, the best-case scenario is – without doubt – keeping your sluice room machinery in a good state of repair, so it continues to serve you well, 365 days a year.

By having a service and maintenance contract in place for your sluice room machinery, you protect your facility, patients and clinicians from crisis. Not only will machines receive the regular maintenance required to keep them working at full capacity, but you will have the back-up measures in place to quickly resolve any issues, should they occur.







# Planned Preventative Maintenance Will Allow Your Facility To Honour Its Clinical Responsibilities For The Long-Term.

There's no need to take a risk with your finances, staff or public trust. By investing in a planned preventative maintenance contract, your sluice room machinery will benefit from maximised uptime with the reassurance that if a technical issue does occur, you'll receive the help you need, precisely when you need it.

A PPM contract from DDC Dolphin includes scheduled servicing, to both predict and prevent mechanical failures. In the long term, this will result in reduced call-outs, as well as the prevention of unplanned repair costs.

Increasing the productivity of your clinicians, while simultaneously reducing the risk of infection, fully optimised sluice room machinery will work incredibly hard – yet still experience a boost in its lifespan. With maintenance payments easily forecast, alongside faith in your technology's longevity, you needn't fear large capex costs. When you factor in the 20% discount on all DDC Dolphin components that you receive with a PPM contract, your long-term financial health is protected.

If your sluice rooms are currently equipped with a different brand of technology, you can still gain from the exceptional advantages of a DDC Dolphin PPM contract; our technicians are experts in all brands of sluice room machinery, even if they are no longer covered by the original manufacturer. Located throughout the country, our technicians can reach you quickly and take care of your full inventory; better yet, their detailed servicing records will allow for full transparency in audits and CQC inspections.

One package, one supplier – but great benefits for every sluice room.

# When Buying A New Machine From DDC Dolphin, 360° Care Cover Will Make Sure You're Protected From Every Angle.

With bedpan washer and macerator packages offering three levels of cover, you can select the package which suits you best; but regardless of which level you choose, you can be confident that your new machinery will operate at its optimal potential, straight from installation.

We know that one size doesn't fit all, which is why we offer Ultimate, Essential and Lite 360° Care Cover options for all of our macerators and washer disinfectors. With benefits ranging from a 5-year parts and labour warranty, to machine commissioning, staff training and starter packs of accessories, you can be confident that your costs are scheduled, forecast and under complete control.

Save money, save time – and have ultimate peace of mind.









### Conclusion

Your sluice room is a lifesaver, but all machines (and humans) are fallible.

To not have a back-up plan to support your infection control procedures is nothing short of foolish; mechanical failure must be anticipated like it's inevitable, but simultaneously minimised through appropriate precautions.

Having a crisis plan, as well as long-term preventative measures, is key to your facility's prosperity; this applies from the treatment room, to the ward, to the sluice room. Any break in the chain could result in a devastating outbreak of infection.

Testament to the fact that sluice room technology is a permanent cog in the machine, macerators are currently used by 85% of UK hospitals<sup>3</sup>. It's no revelation that medical facilities are dependent on the support of technology to underpin their day-to-day operations, but its significance to human waste management is perhaps yet to be fully acknowledged - or worse, seen as expendable in budgeting terms.

In the Department of Health's 'Health Building Note 00-09: Infection Control in The Built Environment', guidance for healthcare design specifically warns against pressures to choose the cheapest products; moreover, 'attention to whole-life costs, including the costs of cleaning and maintenance, is important'4.

Running any facility on a bootstrap budget is unlikely to be practical in the long run, let alone truly beneficial to those to whom you provide care.

There are plenty of cost-effective options which allow medical facilities to employ budget-friendly solutions to sluice room maintenance, which not only ensure essential protection for patients and residents, but clinicians and the public too.

Planning for mechanical maintenance is planning for clinical success.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/170705/HBN\_ 00-09\_infection\_control.pdf (Page 11)





<sup>&</sup>lt;sup>3</sup> https://www.thecarehomeenvironment.com/story/19888/macerator-infection-control