

# Leeds is flushed

**“Invaluable system” ensures Pseudomonas and Legionella compliance at Leeds Teaching Hospitals NHS Trust**

**S**wamped with paperwork from monitoring your outlet flushing regime? Concerns over compliance?

The massive Leeds Teaching Hospitals NHS Trust has moved from the paper-based and time-consuming method of monitoring its Pseudomonas and Legionella outlet flushing. The five-hospital trust has adopted L8guard, an electronic system that takes away all the hassle and helps ensure full compliance.

Libby Moss, the trust’s environmental manager at the time of the initial L8guard trial, tells Hospital Times: “Leeds is a very significantly sized trust. We’ve been on a journey as to how we manage our water systems. L8guard gives us an ability to carry out the flushing and to show that we have done it. It shows that our water systems are turning over and being managed correctly.

“We had so much information across the five hospital sites. Trying to manage the data was very difficult.

“The electronic system shows we have done it and reported on any action required. We have the evidence base to show our compliance.”

Libby, who is now the trust’s sustainability manager, explains: “Lots of other trusts will be grappling with the same issues we had. L8guard has been a very successful system for us. The microbiologists like the data too. They find it very useful.

“From an operational perspective, it’s made the procedure very simple. From a management perspective, the data is easier to view and provides assurance that the under-used outlets are effectively managed. I’d certainly recommend it.”

The system was already in place when Chris Tobin, the trust’s current environmental manager, took over Libby’s role in 2015. “We started using the software in 2013,” says Chris. “It was originally just for Pseudomonas.

“We had a paper-heavy system. L8guard is more for joined-up thinking. Rather than having reams of paper with flushing lists and requiring signatures, operators now have a log-in screen and a printed sheet.

“The beauty of L8guard is that reports are in an archive and immediately available, if required. I receive a daily performance chart from L8guard. It’s very rare that we’re below 99 per cent compliance, which is a testament to our colleagues in facilities, who



Libby Moss, sustainability manager, and Chris Tobin, environmental manager, at Leeds Teaching Hospitals NHS Trust

are very involved in this. Without the support of their patient environment teams it wouldn’t happen.

“I also receive a weekly report from L8guard telling me how we’ve performed and a monthly report.

“We still have the paper record available to print out as a standby in the event of an emergency. In fact, we had one a few weeks ago - the glitch on the NHS computer, which everyone will know about. We simply reverted to printing out the sheets that listed the various taps which needed flushing.”

Chris says: “Initially the flushing was for augmented care units, following the publication of the HTM03-01 addendum - the flushing of augmented care units to prevent Pseudomonas.

“We take a holistic approach to Pseudomonas and have a flushing and sampling regime for over 1,100 outlets.

L8guard gives us the ability to view our historic flushing records without having to sort through boxes and boxes of paper

“At St James’s Hospital and Leeds General Infirmary, this initially covered 35 areas across these two very large sites. Bexley Wing, at St James’s Hospital, for example will easily swallow-up many district general hospitals.

“What we have done recently is to rationalise the analysis and sampling in

augmented care to just clinical areas only. This has been in association with the trust’s Water Safety Group. L8guard gave us a proposal on how they could deliver this. However, we continue to flush every outlet daily for Pseudomonas.”

Chris says: “L8guard advised that we could also use the system for Legionella flushing. Prior to that we had paper records for flushing sentinel outlets across all areas.

“We started with a small, three-month trial in three areas at St James’s in June 2015, identifying underused outlets.

“L8guard was very successful and streamlined the administration of the system. So, we expanded it to the whole of St James’s, adding the estates flushing of underused outlets. Initially our craftsmen and maintenance assistants undertook the flushing. We now have support from facilities for the twice-weekly Legionella flushing.

“We introduced L8guard to Leeds General Infirmary at the beginning of 2016, over a three-month period. We now use the system across all the trust’s five hospitals - St James’s, Leeds General Infirmary, Chapel Allerton, Seacroft and Wharfedale. Wharfedale, managed by BAM, was added in November 2016 as the last piece of the jigsaw. We’re also offering L8guard to our other PFI partners, Engie, as a ‘bolt-on’ to their system.

“L8guard contributes to making sure we’re managing our systems in line with the current guidance documents - HTM04-01 and HSG274. It gives the trust the reassurance without our having to delve into paper records. It’s a very good reassurance tool.”

Chris explains: “There are over 35,000 outlets across St James’s and Leeds General Infirmary which are flushed for Pseudomonas and Legionella over the month. That’s roughly 1,000 outlets per day. Our Legionella chart shows we’re flushing 7,126 outlets weekly.”

“Flushing is for two minutes. The operators have a tick-box system. If an outlet needs a report they can write one, which is flagged up within an exception report.

“The operators report back to their supervisor, who logs onto L8guard and they are greeted with a particular area. Each supervisor manages multiple areas. The system sends alerts if an outlet is not flushed, escalating it after one day to the respective supervisors and after two days to their block manager. If they do not react within a set period L8guard system sends me an exception report telling me where we have not flushed.

“Everyone that’s on the flushing list as an escalation point receives an e-mail from L8guard to advise that the reports are available. They can review their individual departments or the whole system. They can drill down into each area if they wish.

“We get an electronic record of everything we do with L8guard. The benefit is twofold,” says Chris. “It gives us the comfort that all the outlets in the augmented care units are being flushed. When we have a Pseudomonas positive we know that the tap is going to continue being flushed when we are doing remedial work. We have ready access to all the records that have been submitted on the L8guard server. It’s part of the annual fee we pay to Digital Missives, the supplier of L8guard.

“There’s no paperwork, unless I need to print it off. In terms of being ‘paper-light’, there’s need to hold paper records now.”

Having been so impressed with L8guard that he nominated it for an award, Dr Timothy Collyns, the trust’s consultant microbiologist and lead infection control doctor, says: “The flushing of water outlets forms an important part of the trust’s water management procedures in relation to Legionella and Pseudomonas aeruginosa. The trust used to rely on a paper-based system which meant that data interpretation and validation was problematic. With the new electronic system, the data is presented in a format that makes it easy to see what has been completed and therefore provides assurance to myself and my infection control colleagues on this important task.”

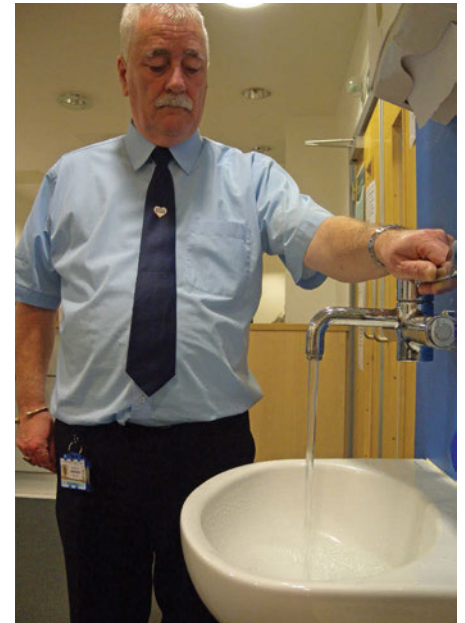
Dr Tom Makin, an experienced legionella consultant and an external advisor to the trust’s Water Safety Group for a number of years, says: “They are a very switched-on and professional group of people. The meetings are always well attended, with representatives from many different departments. Every aspect is addressed. They discuss, in depth, all the analysis.

“Since L8guard was introduced a few years ago, to help with the flushing of the outlets, compliance has increased to 99 or 100 per cent.”

Tom explains: “It’s a massive trust - one of the biggest in the country. Things can go wrong with a water system very quickly. So, they have my admiration for their attention to detail on getting this right.”

Chris Tobin adds: “L8guard is an assurance tool. It’s very effective for the trust. It gives visibility on what activities we are doing in terms of flushing and the remedial work required.

“Because of our flushing regime, we have not had a Pseudomonas or Legionella outbreak at Leeds Teaching Hospitals for a significant amount of time.



Frank Farley, a receptionist at the trust's huge Bexley Wing, is one of the facilities team who undertake the outlet flushing

“The water system’s we have are of a complex nature. At St James’s for example, we have the equivalent of four Olympic-sized swimming pools serving the hospital’s system. So, everything we do, like L8guard, which can help us be more effective and efficient in what we do is very beneficial.”

“L8guard is cost-effective. It will payback very quickly - normally within 12 months and certainly in not more than 18. It gives us the ability to react on a daily basis and helps pinpoint problem areas quickly. In terms of the support they give the trust, L8guard is invaluable. If we’ve had a high count I can report back on how we’ve addressed it. It’s a great asset to my being able to do my job quickly.

“After the initial asset capture and setting up the system, the benefits are apparent from day-one. If CQC wanted information it’s all there, all the reports. I’d certainly recommend it.”

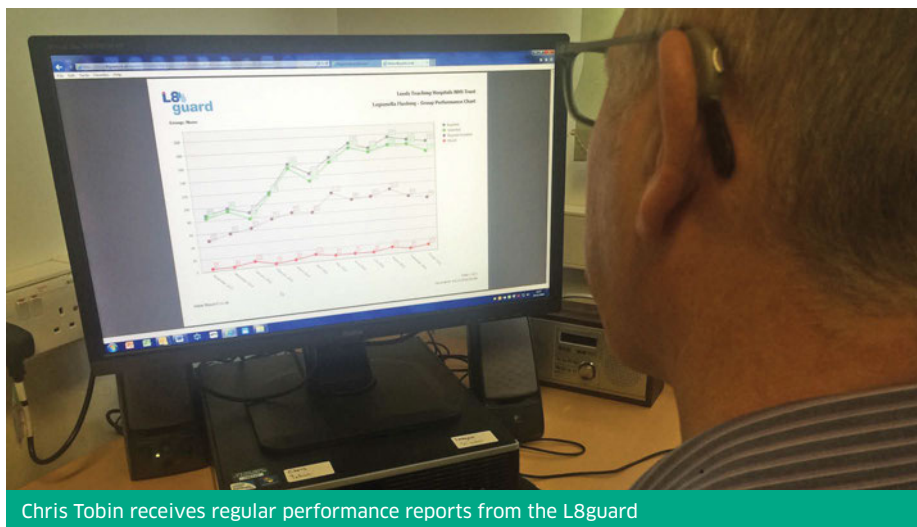
Tim Moore, the designer and developer of L8guard, says: “The system puts people in control of the action and reporting system to the benefit of patient care.

“We’re in constant contact with our users, regularly updating the system to make it more efficient. Enhancements are shared across all clients. It’s one of the benefits of a web-based system. There’s 128bit encryption and all data is backed-up twice-daily to redundant servers. Being a web-based system, there is no installation, which keeps the IT departments happy.

“Users find it’s a simple and extremely cost-effective solution to a tricky problem.”

For more, call 0113 815 0383, e-mail enquiries@l8guard.co.uk or visit

[www.l8guard.co.uk](http://www.l8guard.co.uk)



Chris Tobin receives regular performance reports from the L8guard