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# Water safety plans – the way ahead?

Any commercial business could do well to take a leaf out of the healthcare sector's book, says **Andrew Steel**, Managing Director of **Airmec**.

**C**risis management of an outbreak of *Legionella* or *Pseudomonas* is too late and it is expensive. Water Safety Plans, now commonplace in the health sector, could be the key to the control of water-borne infection through effective internal management of processes.

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So, while holistic is a much over-used word these days, I do believe that it is a concept that should be applied to the control of water-borne pathogens. For one thing, there is a legal, not to mention a moral, duty to avoid outbreaks. For another, raised pathogen levels and 'near misses' are all too often met as crises and managed as such i.e. very expensively. It's far better to be prepared and proportionate in your response.

It is important to have unambiguous lines of budget responsibility, with contingency funding behind them, to enable a timely response to samples that show a raised level of pathogens and nip them in the bud. The use of these budgets must however be guided by procedures applied by competent people. Airmec has significant experience of organisations being ill-prepared to manage the implications of positive test results promptly: the budgets simply did not have contingency for exceptions to the hoped-for norm; and the risks of a full-blown outbreak escalated while the resultant budget negotiations went on.

Yes, there's always money to be plucked from the sky to deal with what is perceived as an immediate, acute risk, but there is rarely fat in the budget to allow for wider measures to assess and then deal appropriately with the near misses.

### Breaking barriers

One of the most welcome changes in thinking that has come about in recent years is the concept of Water Safety Groups (and associated Water Safety Plans) in the healthcare sector. This management approach has been defined as best practice in augmented care units by HTM04-01 since 2013. HTMs – Health Technical Memoranda – are published by the Department of Health and Health Technical Memoranda (HTMs) give comprehensive advice and guidance on the design, installation and operation of specialised building and engineering technology used in the delivery of healthcare.

Primarily conceived in response to increasing incidence of *Pseudomonas* infection, Water Safety Plans will inevitably encompass the control of other pathogens, including *Legionella* and can, and should, be the bedrock of a Trust's prevention measures. Other sectors could benefit from this approach.

Water safety plans can help to break down the old Chinese Walls between facilities and estates management and other departments. They encourage inter-departmental collaboration and so, to my mind, have the potential to make a paradigm change in the effectiveness and efficiency of control measures.



Legionella bacteria.

The health sector's specific guidance (Health Technical Memorandum HTM04) tells you to form a water safety group, assess the risk, have an action plan and know how to sample – but not how to do so. Nor does it really define the best practice that a court of law will be looking for. That's where specialist advice comes in.

The HTM does, however state quite clearly that "A programme of audit should be in place to ensure that key policies and practices are being implemented appropriately". Also that "The WSG should always act in an appropriate and timely manner. Individual responsibilities should not be restricted by the need to hold formal meetings".

Furthermore, reporting and accountability are required to demonstrate effective governance and assurance. The picture is further complicated where estates and facilities provider services are part of a contract, but here your goal should be to leverage the specialist expertise: don't just negotiate around the service level and fees, make sure they contribute to and add value to the planning process, assuming they have the expertise to do so.

In short, we don't really know what compliance to this best practice looks like yet and, thankfully, there has been no need to test one in law. What we do know is what has worked in the past and we have a huge repository of knowledge and experience to draw on with so many more people involved at the sharp end of control: water safety planning is an opportunity for positive change, not a chore.

### The resource efficiency conundrum

Temperature is, and remains, the primary means of control of pathogens, and there is no way around this. Energy managers may balk at the temperatures that are required to maintain control in hot water systems but there is no room for compromise. Almost perversely, avoiding heat gain in cold water systems can be a particular challenge in newer, energy efficiency buildings!

Water Safety Groups can help ensure that the drive to energy efficiency and maximising the life of essential equipment is not in conflict with the over-arching

responsibility of providing a safe, healthy working environment.

Similarly, water efficiency is increasingly on the agenda, too. Flushing of outlets in low use and closed areas is often a waste of water. An efficient flushing regime can reduce consumption, but only if it is based on a live, up-to-date asset register and risk assessment, informed by local knowledge and awareness of the issues. Armed with that information it is feasible to develop a tap/outlet flushing regime that is backed up by effective processes and auditing.

### Who needs to know?

As I mentioned earlier, flushing is one example of the key areas where traditional departmental boundaries between estates and facilities managers and 'operational' staff are being breached.

Typically, it is the estates department that is responsible for flushing, increasingly relying on its own staff to carry it out and record it rather than pay someone to come in and do what should be a simple task. That in itself creates new challenges for auditing measures: What's being recorded? Which outlets and why? How are changes in (frequency of) use reported? How are procedures monitored and challenged? Is everyone very clear what their role is?

The need for training and setting up a comprehensive asset register and informed maintenance schedule is surely self-evident.

Only when people understand their role in control will the temptation to assume that it's someone else's responsibility be eliminated: does the heating engineer know how important it is to report downtime that might reduce the delivery temperature of water, albeit only for a few hours?

Do the hard-pressed facilities and maintenance staff know that they really do need to take so many precious minutes out of their shift to flush the taps? A well-planned training scheme will give each member of the team the knowledge they need.

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