

# Managing legionella

*A new approach to legionella management in Queensland hospitals*

The approach to managing legionella in Queensland hospital water systems has dramatically changed following two positive cases of Legionnaires disease linked to legionella in The Wesley Hospital's water system in June.

The Wesley Hospital response – which included unprecedented cleansing and conducting more than 2000 water tests – was recognised by experts as setting a new standard for managing legionella in hospitals.

A spokesman for Melbourne-based CETEC, which has dealt with significant legionella incidents for the past 20 years and which provided advice to the Wesley and Queensland Health, said The Wesley Hospital had set a best practice benchmark.

“This hospital took the step of putting patient safety above all else by stopping admissions and winding down patient numbers to allow cleansing across the whole hospital,” he said.

The huge undertaking of managing the cleaning and testing for legionella, as well as communicating with patients, staff, specialists and the wider community, was headed by UnitingCare Health Executive Director Richard Royle.

Under Mr Royle's direction, the hospital suspended new admissions for almost a month as it set about methodically cleansing and testing the hospital's water system.

Mr Royle appointed a nine-member Independent Expert Panel to help guide the hospital in the return to full services. The 500-bed Wesley is a large, complex hospital and so the panel recommended a phased approach that involved systematic cleansing and checking of the hospital's three water systems which allowed for the gradual return of services from mid-June to early-July.

The legionella issue quickly changed from being a problem for one hospital to a state-wide issue.

Within days of confirmation of the cases at The Wesley Hospital, Queensland Health asked almost 250 state and private hospitals to test their water systems for legionella.

By early July, results of tests received from 150 hospitals indicated the extent of legionella in water systems: at least a quarter of Queensland hospitals tested had returned a positive result. This was new territory for Queensland because in contrast to most other Australian states, Queensland's advisory guidelines on legionella covered air-conditioning cooling towers but not water systems.

The expert team that The Wesley Hospital assembled to manage the legionella issue was not surprised by Queensland Health's confirmation of widespread legionella in other hospital water systems. This was because in spite of exhaustive testing, the source of legionella at The Wesley Hospital was not identified in the hospital.

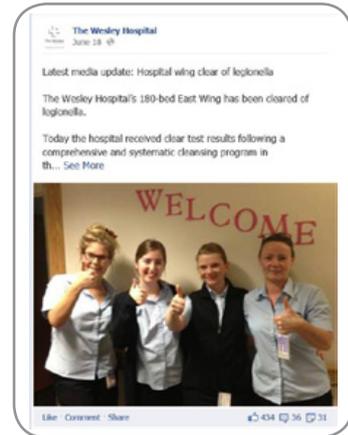
The legionella pneumophila strain, which is most commonly associated with Legionnaires disease, had been identified in at least 17 hospitals by early July.

Queensland's Acting Chief Health Officer Dr Stephen Lambert was quick to reassure the Queensland community that the detection of legionella bacteria was not unexpected and that patients were not at risk because all hospitals detecting legionella, following The Wesley Hospital's lead, had begun a process of cleansing their water systems.



UnitingCare Health Executive Director Richard Royle addresses The Wesley Hospital staff

*“We wanted to make sure that staff were kept in the loop at all times – Facebook proved to be a very useful tool, and we received an overwhelming number of supportive comments, not just from patients, but from our staff”*



Patients and staff used Facebook to express support for The Wesley Hospital

Mr Royle said the hospital’s Independent Expert Panel had provided invaluable advice, particularly on the scale of testing and treatment required to effectively remove legionella bacteria.

He said treating extensive piping across three separate water systems with a regime of cleansing solution, scalding water and chlorine had been a significant challenge. The process was repeated three times.

“It is also important to devise permanent solutions to legionella, so we installed a series of chlorine feeders into our water systems to create an environment hostile to the bacteria, but safe to drink,” he said.

Mr Royle said patient safety had remained The Wesley Hospital’s absolute priority at all times.

“We are committed to conducting regular testing for legionella and to maintaining a comprehensive water management program so that our patients can be reassured that the Wesley remains a safe hospital providing excellent care.”

He praised the hospital staff for their strong support.

“We maintained very regular communication with our staff, specialists, the media and wider community. It was particularly critical to keep staff well informed, and we did this through daily staff forums, emails, notices and by updating the Wesley portal, website and Facebook page, and responding to individual questions.

“We wanted to make sure that staff were kept in the loop at all times – Facebook proved to be a very useful tool, and we received an overwhelming number of supportive comments, not just from patients, but from our staff.”

Queensland Health has issued hospitals with interim guidelines on testing and treating legionella pending an investigation that will be finalised later this year.

“Ultimately, what The Wesley Hospital and other hospitals and health systems are now learning about legionella in hospital water systems will lead to a new approach in managing the problem, and that will enhance patient safety,” Mr Royle added. 