Legionella in schools –
WHAT YOU NEED TO KNOW

Keeping everyone in your school safe from harm is a key priority. But when a potential threat can’t be seen, what can you do to limit the risks?

Stuart Letley from SafetyMARK, the national safety scheme for schools, examines what needs to be done to ensure basic compliance, keeping everyone safe in school.

In terms of premises management, the control of legionella in water systems is one issue that School Business Managers can find they have inherited. Often, they will simply maintain the status quo, rightly or wrongly, or it may be something that is left to one side, particularly if the school has been used to the Local Authority taking control.

Why worry about legionella?
Legionnaires’ disease is caused by the bacterium Legionella Pneumophila, plus related bacteria, and is a potentially fatal form of pneumonia which can affect anybody – but which principally affects those who are already in poor health and susceptible because of age, illness, immunosuppression, or if you are a smoker, and more than 50 years of age. Legionella bacteria can also cause less serious illnesses which are not fatal or permanently debilitating. The collective term used to cover the group of diseases caused by Legionella bacteria is Legionellosis. It is normally contracted by inhaling legionella bacteria, either in tiny droplets of water (aerosols), or in droplet nuclei (the particles left after the water has evaporated) contaminated with legionella, deep into the lungs. There is evidence that the disease may also be contracted by inhaling legionella bacteria following ingestion of contaminated water by susceptible individuals. Person-to-person spread of the disease has not been documented.

Any water system that has the right environmental conditions could potentially be a source for legionella bacteria growth. There is a reasonably foreseeable legionella risk in your water system if:

• water is stored or re-circulated as part of your system
• the water temperature in all or some part of the system is between 20-45°C
• there are sources of nutrients such as rust, sludge, scale and organic matters
• the conditions are likely to encourage bacteria to multiply
• it is possible for water droplets to be produced and dispersed.

Who is the ‘dutyholder’?
In a school, the dutyholder is likely to be either the employer or those with responsibility for the premises – therefore, the dutyholder will vary depending upon the status of the school and who continues to maintain the premises. Schools converting to academy status often do not realise that they automatically assume the role of dutyholder and compliance levels can quickly deteriorate.

Assessing the risk
The dutyholder is responsible for ensuring that a suitable and sufficient assessment is carried out to identify and assess the risk of exposure to legionella bacteria from activities and water systems on the school’s premises. He/she is also responsible for any precautionary measures that might be needed.

The dutyholder must also ensure that the person who carries out the risk assessment, and provides advice on prevention and control of exposure, is competent to do so. Where a school has very low-risk water systems¹, it may be possible for an employee to carry out the risk assessment, providing they have enough knowledge and training to do so. In all likelihood, there will be a need to appoint an external contractor to undertake the assessment.

One way of vetting contractors is to check that they are members of the Legionella Control Association.
Healthy & Safety

Having been through this process, if you decide that the risks are insignificant and are being properly managed to comply with the law, your assessment is complete. You will not need to take any further action, but it is important to review your assessment periodically, (at least every two years), in case anything changes in your system. Similarly, do make sure that your assessor takes into account the significant periods of water system ‘down time’ during school holidays, which can significantly increase the risk of bacterial growth.

In many cases, the assessment will identify remedial measures that are needed to reduce the risk in the water system as well as ongoing monitoring, inspection and maintenance procedures that are required. It is essential that the ongoing requirements are set out in a ‘written scheme of control’. Once you have your written scheme in place, make sure you appoint a competent person to be managerially responsible for legionella control at the school. This may be you, or it may mean appointing a maintenance/estates manager, or even a contractor – but you must ensure that, whoever it is has been appropriately trained.

Controlling and monitoring the risk
You will need to ensure that you follow the written scheme of control, adopting any control measures and monitoring regimes that are required. Make sure that you clearly set out who is responsible for doing what and when, and check that they are doing what is expected of them. Training is essential; there have been occasions where temperature monitoring has been diligently performed, but frequent ‘out-of-range’ temperatures have not been actioned because the procedures and implications were not understood.

Keep records
Records should include details about:
- the person or people responsible for conducting the risk assessment, managing, and implementing the written scheme
- any significant findings of the risk assessment
- the written control scheme and its implementation, and
- the results of any inspection, test or check carried out, and the dates.

These records should be retained during, and for at least two years after, the relevant period. Records kept in accordance with inspections, tests or checks should be retained for at least five years.

DID YOU KNOW...

- Low-risk water systems may be found:
  (a) in a small building without individuals especially ‘at risk’;
  (b) where daily water usage is inevitable and sufficient to turn over the entire system;
  (c) where cold water is directly from a wholesome mains supply (no stored water tanks);
  (d) where hot water is fed from instantaneous heaters or local volume water heaters (supplying outlets at 50°C);
  (e) where the only outlets are toilets and wash hand basins (no showers).

- A ‘written scheme of control’ is an action plan for preventing or controlling the risk.

- The relevant period is the date when the assessment is conducted.

- In the news: Eastern High School in Cardiff closed within two days of opening, after the Legionnaire’s bug was found. (BBC News, September 2013: www.bbc.co.uk/news/uk-wales-south-east-wales-24072238)

For further information see:
Legionnaire’s Disease – ‘a brief guide for dutyholders’:
www.hse.gov.uk/pubns/indg458.htm

Sample recording sheets can be found at:
www.hse.gov.uk/legionnaires/resources.htm

Legionnaire’s disease. The control of legionella bacteria in water systems. Approved Code of Practice and guidance (LB):
www.hse.gov.uk/pubns/books/18.htm