East Midlands 5+1
Updates on Pool Water and Legionella Management etc

Rob Johnston
PHE FW&E Microbiology Laboratories
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Updates on Pool Water Management

- Swimming pool guidance – PWTAG
- Additional guidance – PWTAG ……
- Spa pool guidance – HSE
- PHE Legionella Guidance
Swimming pools – types and treatment regimes are variable

What are the challenges?
Swimming pools – types and treatment regimes are variable

Water management challenges?
What can happen if we lose control of water management?

Kent Online; News You Can Trust

‘Public Health England conclude Medway Council at fault following investigation into norovirus outbreak at Splashes, Rainham’

http://www.kentonline.co.uk/medway/news/council-at-fault-over-pool-125136/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2870659/
What can happen if we lose control of water management?

8 cases of E. coli O157 - Trafford area of the Manchester conurbation 2004

Analysis of the questionnaires established a link that all four cases had been swimming in the learners’ pool of a local leisure centre

No obvious source of E. coli O157 was found – but epidemic curve, descriptive epidemiology and laboratory data consistent with a single contamination event such as faecal incontinence event on the morning – before exposure

On that Sunday morning, the level of free chlorine in the pool was ‘probably <0.5 mg/l - inadequate to disinfect the pool’.

Water Safety Plans – WHO 2005
Guidelines for safe recreational water environments

http://www.who.int/water_sanitation_health/bathing/srwe2full.pdf

Pool Water Treatment Advisory Group Guidelines –
Guidance to support risk based assessments in recreational waters
Established as an independent entity in December 1984.

Membership drawn from a wide range of relevant bodies;

- Statutory, including Public Health England
- voluntary
- Professional organisations

Independent without commercial or other influence.

Provides a focus point for debate and improvement in operational and management standards

https://www.pwtag.org.uk/
Pool Water Treatment Advisory Group;  
Three key parts to PWTAG Guidance

PWTAG Code of Practice;

• a structured plan for the technical operation of their pool.
• ensures the technical operation of a pool meets quality standards that provide a healthy experience for swimmers
• provides a model of operation based on the authority of PWTAG good practice.
• gives an assurance that the pool meets essential pool operational standards.

Technical Notes;

• Updates or new material for the standards and guidance given in the PWTG book, Swimming Pool Water and the PWTAG Code of Practice
• To be read in association with the other publications.

https://www.pwtag.org.uk/technical_notes/
Swimming Pool Water; The essential guide for pools

To be used by:
- Designers
- Suppliers
- Operators
- Managers
- Investigators

Complied with a ‘conventional’ pool in mind; Principles apply for all types of pool.

Publication/Release date; November 22\textsuperscript{nd} 2017
Onsite inspections of SPA pools

Updates on spa pool and swimming pool management and legionella investigation guidance
Control of legionella and other infectious agents in spa-pool systems

- Guidance for those who manage or operate spa systems
- Includes the management and control measures for legionella (and other infectious agents – eg pseudomonas and mycobacteria)
- Guidance may also assist suppliers, designers, manufacturers, and installers
- Specific advice on domestic-type spa pools or hot tubs used as part of a business activity
- Includes testing, monitoring and the frequency of inspections

Published 2017

Control of legionella and other infectious agents in spa-pool systems

Risk assessment by the duty holder to identify possible risks – precedes health and safety management system

Risk assessment to enable a decision on;

• Risk to health – from exposures

Risk assessment to include;

• Measures required to prevent or adequately control the risk from exposures or infectious agents

http://www.hse.gov.uk/pubns/books/hsg282.htm
Control of legionella and other infectious agents in spa-pool systems

Information box 1 Pool safety operating procedure (PSOP)

Normal operating plan (NOP)
The NOP should set out the way the system operates on a daily basis and should include details of the layout, equipment, manner of use, user-group characteristics and any hazards or activity-related risks.

Emergency action plan (EAP)
The EAP should give specific instructions on the action to be taken, by all staff, in the event of any emergency.

How the plans can be kept
The plans can be kept as written documents or stored electronically, provided that employees have access to them and that they are available for inspection by the enforcing authority, if required.

http://www.hse.gov.uk/pubns/books/hsg282.htm
Control of legionella and other infectious agents in spa-pool systems

Written scheme (page 14) should specify:

- Spa pool and plant – and include a schematic
- Description of safe operation of the pool
- Checks required to ensure pool is operating safely
- Remedial actions – when monitoring shows that controls are ineffective
- Information for users
Legionella Guidance

Guidance on investigating cases, clusters and outbreaks of Legionnaires’ disease


Legionnaires’ disease: information on sampling of household water systems for householders

Considerer water management and verification – swimming pool water microbiology
Questions

Thanks
PHE Colleagues
LA Environmental Health