



Controlling Exposures to prevent occupational lung disease in the construction industry

Case Study

Park Health

The Olympic Park and Athletes' Village

Building the business case for prevention: saving costs

Occupational hygienists from Park Health worked as part of its multi-disciplinary team providing Occupational Health support during the construction of the Olympic Park and Athletes' Village leading up to the London 2012 Olympic Games. The construction of the Olympic Park and Athletes' Village was a major and complex project extending over 500 acres of formerly mixed-use land, and involved creating major venues for use during and after the events of 2012, as well as extensive infrastructure development and the landscaping of new parklands. The peak workforce was estimated to be around 12,000 people and around 46,000 people worked on the Park and Village over the lifetime of the project.



Quantifiable economic benefits

Here are some specific examples of how the Park Health occupational hygienists worked with different contractors to resolve emerging issues through cost-effective occupational hygiene solutions that led to significant and quantifiable **financial savings of over £750,000**:

- Following the identification of potential methacrylate exposure, the on-site occupational hygiene team was able to save a contractor an estimated £20,000 through speedy identification of the problem, and the introduction of a simple, but effective control regime.
- Having knowledge of likely contaminants on the site allowed the
 occupational hygiene team to quickly identify that irritating odours
 that were causing discomfort to the operatives were sulphide
 based and these would be unlikely to cause any significant health
 effects. As a result, the contractor was able to save an estimated
 £98,000 as works could continue without disruption.
- The ability to offer immediate access to tailored asbestos awareness training allowed the hygiene team to save one contractor an estimated £656,000 as its large workforce were able to quickly return to work following site closure after the identification of asbestos containing materials.

On-site health risk reduction

These case studies show that having occupational hygienists working as part of the health and safety management team meant they were able to respond more quickly, with access to better information about the site, and provide a more appropriate response than would be the case if occupational hygienists were brought in on an ad hoc basis. An on-site team can help to reduce the likelihood of unforeseen risks emerging and provide cost-effective solutions when they do. This can be extremely important in keeping projects of this size on track in terms of timetable and budgets.

Reducing sickness absence & ill-health

The research report¹ from which these case studies have been taken also estimated the economic benefits of the whole service, through a cost-benefit analysis using existing data relating to the costs of the service provision and the costs and scale of sickness absence and ill-health within construction and put forward a number of scenarios for how much difference having occupational hygienists made for the Olympic workforce. We've summarised this analysis in a separate case study: 'Park Health – the Olympic Park and Athletes' Village, Building the business case for prevention: reducing sickness absence and ill-health'.

www.breathefreely.org.uk



BCHS

British Occupational
Hygiene Society

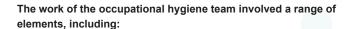
The Chartered
Society for Worker
Health Protection

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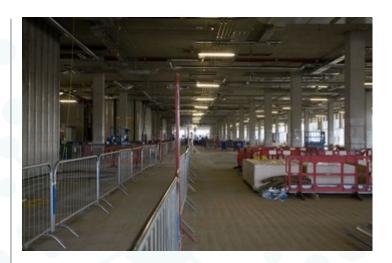
Occupational Hygiene within Occupational Health

On the Park and Village the occupational hygienists provided strategies to prevent work-related ill-health from occurring. The team were involved at a leadership level on site, being regular attendees at all senior team health and safety meetings helping to ensure that all site initiatives for safety also included consideration of how to protect worker health. Regular and competent occupational hygiene support on site was provided so that as all design work, method statements and risk assessments were being compiled, assessed and adjusted to ensure there was an adequate focus on eliminating and reducing exposure to health risks in the workplace. The team was also involved in design decisions, and their involvement much earlier in the design process enabled risks to be 'designed out' more effectively before reaching the site. The services were available and free to all contractors and workers on the site.



- Assuring standards in partnership with the ODA's delivery partner.
- Engaging contractors with the need for and benefits of workplace health management. This helped contractors meet their key performance indicators set by ODA and produce occupational health risk registers for each project. The occupational hygienists could then examine possible upcoming exposure issues and use the principles of prevention to eliminate or reduce them.
- Enabling contractors to improve workplace health management through risk assessment reviews and the production of risk management plans which contractors were encouraged to implement themselves.
- Establishing a presence at regular health and safety meetings across the site allowing access to senior and other managers by the occupational hygiene team, and which encouraged contractors to benchmark their performance on occupational hygiene with each other.
- Designing tools which helped contractors monitor their occupational hygiene performance and the effectiveness of their control measures.

The service received a very positive reaction from workers and managers and a number of awards recognising its achievements. Managers in particular learned a lot from working with occupational hygienists and from implementing the 'health like safety' approach.





Occupational Hygiene at the Olympic Park and Athletes' Village', the Institute for Employment Studies: www.employment-studies.co.uk/system/files/resources/files/497.pdf