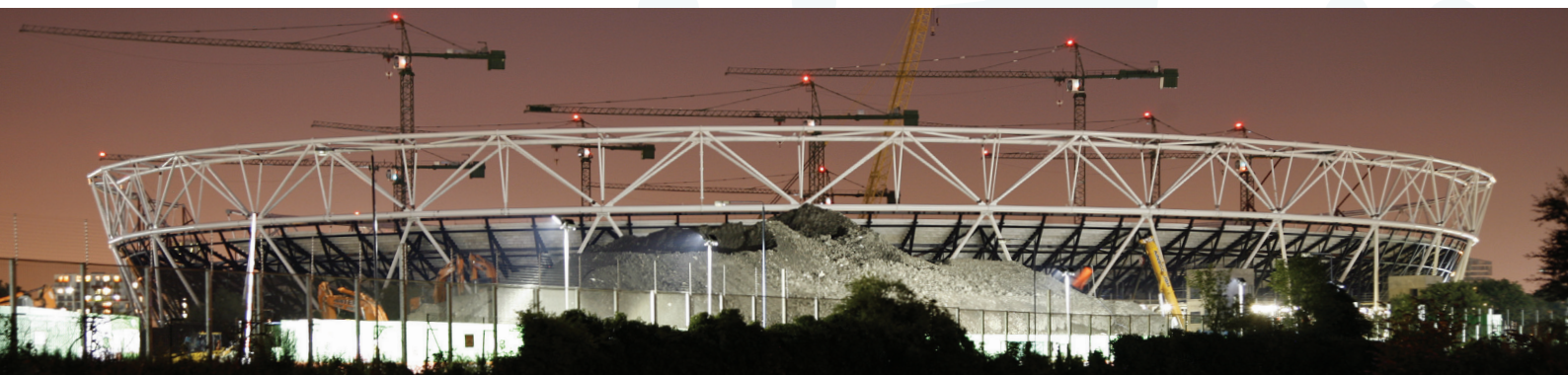


Park Health

The Olympic Park and Athletes' Village

Building the business case for prevention: reducing sickness absence and ill-health

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.



Estimated economic benefits of the whole service

A cost-benefit analysis of the work of the occupational hygiene team has been conducted by the Institute for Employment Studies [IES]. This used existing data relating to the costs of the service provision and the costs and scale of sickness absence and ill-health within the construction industry as a whole, and put forward scenarios for how much difference having hygienists made for the Olympic workforce, in terms of reduced sickness absence and reduced ill-health.

Reduced sickness absence - a benefit to employers

The first calculation considered the costs of sickness absence, and has shown that there was a likely **reduction in sickness absence of 0.58 days per worker**, with a **net benefit of approximately £7 million** of providing the occupational hygiene service over the project life.

Health and Safety Executive (HSE) data states that the construction industry has around 0.97 working days lost per worker. In Construction around 2.1 million working days were lost each year (between 2017 and 2020) with 75% of this figure being due to work-related illness. The anticipated costs of work-related sickness absence on the Park/Village without any interventions would therefore have been £12.1m. In order for the occupational hygiene service to cover its costs through reduced work-related sickness absence, a reduction of just 30 minutes per worker would need to be achieved. If the preventative programme led to a reduction in health risk exposure of two-thirds (in line with the documented achievements on safety), and if this relates directly to a reduced sickness absence rate, the absence rate on the Park would be 0.33 (a reduction of 0.64 days per worker). It was not possible to validate this assumption using actual on-site absence data as there were a huge number of contractors working, and no centralised record of absence. However, a reasonable assumption was made based on the available data that shows that reduced exposure does reduce absence. Using this model the net benefits of providing the service were around £7 million (with no account taken in this model of the costs of presenteeism to the industry, which could be significant).

Reduced ill-health - a benefit to society and individuals

A second set of two different calculations estimated the economic benefits of reducing new incidences of work-related ill-health. This has shown a possible **net benefit of between £6.4 million and £80.7 million, or a return on investment as high as £74 per £1 spent** could be achieved for a workforce of equivalent scale over three years if all new cases of ill-health could be prevented through good occupational health management.

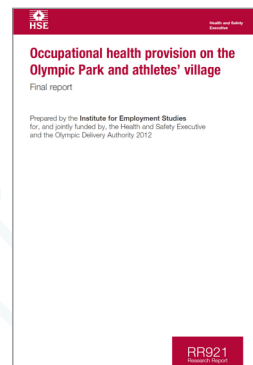
The figures produced are best viewed as what could be achieved if health risks were well managed across the whole of construction. In such a situation (ie. cases of new ill-health were prevented through good workplace practice), an estimate of the potential scale of benefits for a workforce the size of that working on the Olympic build can be made. Estimates of the annual incidence of new cases of ill-health occurring amongst construction workers were taken from HSE published data based on the self-reported work-related illness (SWI) and workplace injuries component of the Labour Force Survey (LFS).

Two different calculations were made:

- Using HSE appraisal values for ill-health of **£16,100 per case**, a **net benefit of £6.4m** would be achieved.
- Using estimates of the lifetime costs of occupational asthma (which are estimated to be **£176,000 per case**) gives a **much higher net benefit** of a programme like that run on the Park and Village, of **£80.7m**.

Therefore if a workforce the size of that on the Olympic Park and Athletes' Village could, via reduced levels of exposure, be prevented from contracting occupational disease, the return on an annual investment of just £350,000 a year would be substantial. A simple calculation of the return on investment from preventing illness amongst the workforce suggests that the returns could be as high as £74 per £1 spent.

Overall, therefore, there are substantial benefits to employers in preventing work-related sickness absence, and substantial benefits to society and individuals in preventing occupational illness. In both cases, the potential benefits of using an occupational hygiene team to implement good occupational hygiene controls is likely to far outweigh its cost.



The full IES report¹ sets out the range of assumptions at the basis of these cost-benefit analysis models and details the limitations of the conclusions. Also included in this report are examples of occupational hygiene solutions to issues which emerged during the construction phase which led to significant financial savings for different contractors on the project, which we have summarised in a separate case study: *'Park Health – the Olympic Park and Athletes' Village, Building the business case for prevention: saving costs'*.



¹ 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