Case study:

Health Impact Frequency Rating (HIFR)

Summary

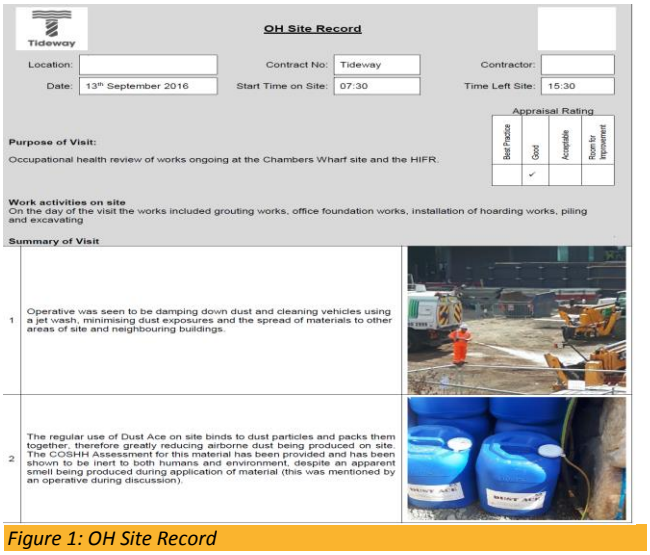
- Tideway decided to begin measuring a leading indicator for health across all projects. Health Impacts Frequency Rate (HIFR) was the measure adopted
- Park Health, the occupational hygiene team employed on Tideway projects, created and developed the Health Impacts Frequency Rating (HIFR) system on the London 2012 project. The HIFR was developed as part of research into the creation of a leading indicator for health.
- HIFR is calculated in the same way that Accident Frequency Rate (AFR) is (i.e. incidence rate per 100,000 man hours), only with the number of reportable incidents and injuries substituted for health impacts.
- The HIFR involves the observation of current works and whether there are any occupational health concerns with these works such as, noise exposure, dust exposure and diesel emissions which could impact upon the health of individuals.

Problem statement

- Analysing statistics regarding accidents and near misses on site is an important tool to identify any trends regarding safety management, allowing controls to be updated to ensure the workplace becomes safer.
- However, there is a lack of recognition of the extent to which occupational health issues affect operatives on site, which could therefore mean that an “unhealthy” working environment could go unnoticed for significant periods of time.
- This may be due to health effects having a long latency period, so the effect is not seen until many years later. But it was felt that a leading indicator would be useful to make health more like safety and to identify trends in ‘unhealthy’ tasks and behaviours.

Solution / what you did

- Tideway has mandated the Health Impact Frequency Rate (HIFR) as a leading indicator for health across the project.
- At present HIFR is measured and calculated with the assistance of the project occupational hygiene team.
- The HIFR system records what the health impact was and the behaviours which contributed to the health impact occurring (for example if there were inadequate controls, or lack of sufficient supervision).
- The HIFR encourages managers and operatives to better understand exposures to health risks and to consider the potential consequences and improve controls.
- HIFR is reported weekly to sites and immediate actions are taken where trends are recognised. Monthly HIFR is reported to Tideway as the client for all main works contracts which allows for a wider view of health risks and pre planning of interventions.
- HIFR was trialled on the Olympic Park but has since not been validated on other construction sites and it is hoped that Tideway’s proactive approach will enable this system to become an accepted indicator for health risk.



Tideway

OH Site Record

Location: | Contract No: Tideway | Contractor:

Date: 13th September 2016 | Start Time on Site: 07:30 | Time Left Site: 15:30

Appraisal Rating

Best Practice	Good	Acceptable	Room for Improvement
	✓		

Purpose of Visit:

Occupational health review of works ongoing at the Chambers Wharf site and the HIFR.

Work activities on site

On the day of the visit the works included grouting works, office foundation works, installation of hoarding works, piling and excavating

Summary of Visit

1	Operative was seen to be damping down dust and cleaning vehicles using a jet wash, minimising dust exposures and the spread of materials to other areas of site and neighbouring buildings.	
2	The regular use of Dust Ace on site binds to dust particles and packs them together, therefore greatly reducing airborne dust being produced on site. The COSHH Assessment for this material has been provided and has been shown to be inert to both humans and environment, despite an apparent smell being produced during application of material (this was mentioned by an operative during discussion).	

Figure 1: OH Site Record

Key challenges faced

- The introduction of HIFR has been integrated within the management of OH for sites as it is a mandatory requirement and is reported every month, however as the system is new to contractors there has been a need to educate all on the system and the outputs
- Finding a simple system of reporting back to sites and tracking the close out of actions has been challenging.
- There have also been challenges in engaging the operatives on site with the HIFR and what we are looking for.

Outcomes and benefits

- Tracking of impacts and trends across sites and being able to put immediate actions in place where a trend is spotted.
- Instant education during visits to site for operatives to help them in understanding the need for controls for health risks
- Longer term education for both operatives and management on what controls are needed for different health exposures.

Measures of success

- Benefits have been seen in the fact that trends can be addressed immediately but longer term success will be measured through the HIFR scores.
- It is hoped that once we have a baseline, the HIFR score should reduce through operatives and management understanding the controls needed to reduce health impacts.

Lessons learnt

- Operatives need to be educated on emerging trends that occur through the use of HIFR through tool box talk on health effects and how to control the health impacts.
- This would reduce the HIFR score as operatives would understand exposures and their health risks and what controls need to be put in place to control these health risks, reducing their exposure in the future.

Contact details
Thames Tideway
www.tideway.london
@TidewayLondon