

Chapter 8

The European Healthy Stadia Network

Sports Stadia, Public Health and Sustainability

Matthew Philpott and Russell Seymour

Introduction

In this chapter, the authors will introduce the Healthy Stadia concept, its origins, and how the concept has been adopted in practice. The chapter will then chart the rising importance of environmental sustainability to the Healthy Stadia agenda and the links between sustainability and public health. Finally, the authors will give examples of sustainability initiatives embraced by sports stadia, moving on to a case study of the Lord's Cricket Ground (UK) detailing their waste management and recycling schemes and wider sustainability strategy.

Sports Stadia and Health

There has been a long standing acknowledgment of the health benefits and societal gains to be made through participation in physical activity and sports¹. Through advances in sports science, nutrition and training tech-

1. WHO (World Health Organisation) 2003

niques, we now have the fittest and fastest generation of athletes on the playing field, track and in the pool. However, there has only been limited attention² paid to the role that both professional and amateur sports clubs, and in particular *their stadia* as hubs of the community, can contribute to raising the levels of public health and wellbeing, social cohesion and – of specific interest to this paper – environmental sustainability.

For many years the idea of utilising a ‘setting’ to promote health and reduce health inequalities has been applied to a number of everyday environments. The settings approach developed quickly after the World Health Organisation’s (WHO) Ottawa Charter³ laid the foundations for much of modern health promotion, shifting the emphasis away from the individual and concentrating on the living environments and organisational structures as a medium to promote health. This approach has already seen success in contexts of schools, workplaces and even hospitals and prisons, and has been used by public health agencies⁴ (in particular the WHO) to deliver interventions aimed at tackling lifestyle issues associated with smoking, diet and even substance misuse. Over the last five years, the potential for using sporting stadia as health promoting settings has started to be realised, not only to the benefit of local communities, but also to help achieve the corporate objectives of the clubs and stadia involved⁵. In the UK alone, a wide range of projects aimed at helping sports stadia to promote initiatives that fans and staff can *opt into* concerning lifestyle choices and social and environmental issues have been rolled out on a local and national level⁶.

One of the most significant developments in this field in the last five years, certainly in terms of its geographical reach, has been the formation of a European Healthy Stadia Network. This Network, coordinated by UK based cardiovascular disease prevention charity Heart of Mersey and part-funded by the World Heart Federation, now consists of over 170 stadia and organisations and is the continuation of a public health pilot project, co-funded by the European Commission between July 2007 and December 2009. To date, the Network has brought together representatives from twelve European partner countries, and a mix of organisations involved in

2. For articles relating to professional sports stadia, see: Jackson et al. (2005). Crabb and Ratinckx (2005). For articles relating to health promotion through amateur clubs, see: Dobbinson et al. (2006). Kokko (2010).

3. WHO (World Health Organisation) (1986).

4. For introductory texts to the concept of health settings and health promotion using specific types of settings (hospitals, schools, prisons), see: Dooris (2004). Whitelaw et al. (2001). Pelikan et al. (2001). Lister-Sharp et al. (1999). Whitehead (2006).

5. For introductory texts to professional sport and CSR, see: Smith & Westerbeek (2007). Babiak & Wolfe (2009).

6. Within the UK, a number of governing bodies of sport and professional leagues have started to address the potential role of health promotion through sports stadia and professional sport, in particular: Premier League Health (football Premier League); Something to Chew On (Rugby Union’s Premier Rugby); and, Clubs That Count (Business in the Community).

both sports and health. These include governing bodies of sport such as UEFA (Union of European Football Associations), health agencies such as the European Public Health Alliance and the World Heart Federation, and many well known clubs and stadia, including Liverpool FC's stadium Anfield (UK), Milan's San Siro Stadium (Italy), and the Aviva Stadium (the new national stadium for Ireland).

Healthy Stadia – Concept and Implementation

The concept of a 'Healthy Stadia' can be traced back to the modernisation of UK sporting stadia in light of the Bradford and Hillsborough tragedies of the late 1980's. Not only was there an imperative for stadia to become *safer* places for supporters to visit, but it was also recognised that there was a real opportunity for stadia to become viable healthy settings for both fans *and* employees.

Food and drink choices both inside and immediately surrounding the stadia are, in general, high in saturated fats and sugar⁷. Similarly, green transport access routes to stadia are often very poor, with cycle parking rarely offered, whilst the excellent fitness facilities inside stadia and training grounds are generally not accessible to the surrounding communities. In addition, the considerable marketing potential of playing staff is often used by companies promoting less healthy product lines, generally at odds with the nutritional intake of the athletes on the pitch. Whilst this conventional view of stadia and their 'offering' is still often the case, there are clear signs of change and huge opportunities ahead, and this assertion is backed up through a European audit of current 'Healthy Stadia' practice (see next section). Sports stadia play iconic roles in communities and are capable of reaching large numbers of people, both in the grounds and surrounding areas. Furthermore, the demographic and age-group of fans visiting stadia – middle aged, working class males – are exactly those who are the most susceptible to growing health problems such as obesity, cardiovascular disease, testicular cancer and mental health issues.

Realising these opportunities, from 2005 onwards a number of projects and initiatives in the North West of England have worked with local stadia to adopt healthy initiatives aimed at fans, visitors and staff⁸. As a result of these regional projects, a working definition of a 'healthy' stadium has been established, namely:

'Healthy Stadia arethose which promote the health of visitors, fans, players, employees and the surrounding community... places where people can go to have a positive healthy experience playing or watching sport'

7. For a useful discussion of food supply in stadia and football fans attitudes to food choices, see: Ireland and Watkins (2010).

8. Crabb & Ratinckx (2005). Haig & Crabb (2006).

In the case of a sub-regional pilot project run with stadia in the Merseyside area of the UK – including stadia representing football (Everton, Liverpool and Tranmere FCs), rugby league (St Helens and Widnes RLFCs) and horse racing (Aintree Race Course) – the healthy stadia approach has been firmly based on a commitment to partnership-working with local agencies, encompassing health services, urban regeneration agencies, emergency services, education, transport authorities, and food and drink suppliers. Many successful healthy lifestyle initiatives have been developed over a five year period and embedded within stadia, examples of which include:

- Displaying and promoting the fruit and vegetable 5-a-day message to supporters and visitors. For one stadium, this includes a fruit delivery scheme in the main reception area, with a range of healthier food choice options now available in staff canteens.
- Players' diets and healthy eating messages are included on the club websites in a 'Healthy Stadia' section. Players now regularly endorse healthy eating messages in the work they do with local communities.
- Initiatives have been rolled out that are aimed at increasing physical activity in children through various community schemes, and use of stadia training facilities.
- Local health walks have been developed to and from stadia with encouragement to progress to more advanced exercise, with pedometers provided.

Even at this early stage in the development of the Healthy Stadia concept, it was recognised by sports clubs and local partner agencies that there were distinct opportunities for sports stadia to make a positive impact on the overlapping areas of public health and environmental sustainability, and this will be discussed in further detail in later sections of this paper. Therefore, in addition to the lifestyle initiatives already described, stadia in Merseyside also adopted green travel plans to encourage walking and cycling to stadia, including cycle storage made available at some sites, whilst all stadia became smoke free before UK legislation came into effect, with many now looking to support those wishing to quit smoking through smoking cessation drop-in clinics.

European Programme of Work

Following the success and interest generated by the Merseyside Healthy Stadia Programme, a successful proposal for a 'Sports Stadia and Community Health' project was made to the European Commission in the framework of its Public Health Programme⁹. This project worked with an initial group of partner agencies in Finland, Greece, Italy, Latvia, Ireland, Poland,

9.Parker & Ireland (2007).

Spain and the UK, and was tasked with piloting the Healthy Stadia concept with stadia in a cross-section of European countries and developing suitable guidance documentation to further the future roll out of healthy initiatives. One of the key activities for the European programme has been to establish a benchmark of current practice concerning Healthy Stadia initiatives across Europe. Following an initial literature review, in March 2008 a questionnaire enquiring into the stadium's age, ownership, capacity and range of 'healthy' initiatives was disseminated by European project partners for an eight month period, resulting in returns from 10 different countries, representing over 12 different sports. Of the returns, 51% of respondents were involved in community engagement, with 55% participating in partnership-working, whilst an impressive 70% of stadia and clubs had players working as 'health champions' within their communities. The majority of initiatives focused on the themes of tobacco control in stadia and smoking cessation, and healthy food and drink choices, whilst there was also substantial work in the areas of physical activity, mental health and, of particular significance to this paper, green transport planning, promotion of public transport and car pooling, water and/or energy saving schemes and stadia-based recycling programmes.

Building on this initial evidence base, the key product that has been created through the European project is a Healthy Stadia 'Toolkit'. This guidance document is aimed at stadia management and intermediary partner agencies, and has drawn heavily on pilot projects that have been run with sports stadia in Finland, Ireland, Spain and Latvia. The Toolkit provides users with a walk-through of the basic steps needed to role out Healthy Stadia initiatives, such as putting an action plan together, locating partners, evaluation and mainstreaming of healthy initiatives. This set of guidance is also supported by a host of case studies drawn together from stadia participating in the Programme, and these have been grouped together under the three themes of Lifestyle, Social and Environmental. The Toolkit and a selection of its case studies are available as a hard copy document and as an online toolkit available at: www.healthystadia.eu.

In order to disseminate much of the learning and results from this programme of work, a European conference was held in Liverpool (UK) in September 2009, where the Healthy Stadia Network was officially launched. In addition to keynote speeches from UEFA, the European Commission and major sports stadia such as Anfield (Liverpool FC) and the Amsterdam Arena, the findings from the audit of current practice, the piloting of the Toolkit and case studies generated through the European programme were disseminated to over 250 delegates¹⁰.

10. To access conference presentations, conference report and all published documents produced by the EU funded programme of work, please see: www.healthystadia.eu/index.php/resources/downloads.html

Environmental Sustainability & Public Health

Charting the growth of the Healthy Stadia Network since 2005, firstly within the UK and then in other European countries, it is interesting to note that what started as a project predominantly focussed upon sports stadia and lifestyle initiatives, has increasingly seen greater interest from stadia in adopting environmental sustainability initiatives that also have a positive affect on health. The interrelationship between health, the environment and health inequalities has been brought keenly into relief in recent years, and is now recognised as a key theme across all sectors of society; from businesses such as sports stadia to the fans and employees that utilise them, there is a growing recognition that in order to promote good levels of health and to reduce health inequalities, there is also an overwhelming responsibility to promote a healthy environment¹¹.

In addition to traditional conceptions of health, such as freedom from disease and positive lifestyle choices, there is now recognition of key environment and health ‘interfaces’¹², including, good quality and well located housing, green transport options (safe walking and cycling routes), protection of clean air and water, low exposure to noise, and as discussed in the following case study, minimisation of waste. Within the context of sports stadia, many of these *joint* environment and health themes have now been recognised as areas of intervention from the perspective of environmental impact. In addition, there is also a growing recognition amongst sports clubs and major sporting events that they can use their iconic status at both local and global level to promote environmental responsibility amongst end users – fans, viewers, staff and residents in local communities¹³.

Over the course of Healthy Stadia’s European programme of work, a wide range of environmental-based initiatives have been set up to positively affect the health of fans, employees and local communities¹⁴. As a direct result of the programme, stadia in Ireland have promoted walking routes to stadia with the additional supply of safety walking lights to school children during winter months, whilst a collection of stadia in Finland have developed a widely adopted car pooling scheme for professional players, staff and fans alike. In Latvia, stadia have used the powerful voice of local sports stars from basketball and volleyball to promote environmentally friendly lifestyles to local school children, and in the UK clubs such as Liverpool FC have rolled out initiatives that both engage and incentivise local children to clear away litter from areas surrounding the stadium on match days.

11.Griffiths & Stewart (2008). Griffiths et al. (2009).

12.See, Donaldson & Donaldson (2003). in particular Chapter 10.

13.Smith and Westerbeek (2004). Schmidt (2006).

14.Please refer to the European Healthy Stadia Network’s website ‘Case Studies’ for further information – www.healthystadia.eu

It is widely recognised that numerous new-build stadia have ‘designed-in’ sustainability features – e.g. rain harvesting systems – as part of their everyday operations¹⁵, whilst existing stadia are already working towards environmental standards accreditation aligned to their operations, for example the ISO 14001 certification (Environmental Management Systems), and more recently in the UK, the BS8901 certification in Sustainable Event Management. Examples of this work include systems leading towards a lowering of CO₂ emissions and energy consumption, water conservation techniques, and recycling and waste management schemes. An example of a newly built stadium that personifies an integrated approach taken to environmentally sustainable operations that has recently joined the European Healthy Stadia Network is the Aviva Stadium in Dublin, Ireland. In addition to the stadium’s design supporting extensive use of natural light, and the development of a rainwater harvesting system that can store up to 32,000 litres of water for pitch irrigation, the Aviva Stadium has taken an innovative ‘peer approach’ to promoting water and energy efficiency. In the spirit of transparency and peer motivation, the Aviva Stadium now discloses its energy and water consumption behavioural patterns and utility related footprint to ensure a best practice approach in all areas of operation. Not only is this practice a useful self-monitoring strategy for the stadium, but this is also intended to encourage other stadia to become equally transparent and participate in similar activities.

Finally, it should be noted that in addition to the public health, social and environmental benefits of adopting a Healthy Stadia approach, it has become clear from engagement with stadia across Europe that there is also a coherent *business case* to be made to stadia management and partner organisations involved in delivering Healthy Stadia initiatives. Engaging with the *wider* Healthy Stadia agenda can help build a positive corporate profile, engage with a broader audience, nurture new partnerships, uncover further business opportunities and help secure additional sources of funding. It is hoped that the growing recognition by sports clubs and stadia to engage positively with the burgeoning corporate and social responsibility movement will act as a vehicle to allow public health and its links with environmental sustainability to flourish in the years ahead.

To finish this chapter, and for the reader to understand the strategic and day to day considerations of stadia management engaged in environmental sustainability, there now follows a case study from Lords Cricket Ground in the UK. This case study is from a first person perspective, and offers a unique insight into the development of an integrated waste management system at an historic sports stadium, including its key considerations, challenges and successes to date.

15. For an introduction to architectural design of stadia and the imperative of environmental sustainability, see: John, G. et al. (2007).

Lord's Case Study

Dr Russell Seymour, Sustainability Manager – Lord's Cricket Ground, UK

In recent years, sustainability has become a significant political and social issue. Rising energy and water costs, increasing insurance premiums, variation to business because of climate impacts, and the likelihood of further regulation and reputational issues mean that forward-thinking businesses are addressing sustainability and will continue to do so. The Marylebone Cricket Club (MCC) and Lord's Cricket Ground believe that sports stadia should be no exception; it could be argued that, with its need for a clean and healthy environment for athletes to train and compete in and its expectation of fair-play, sport is closer to these issues than many other businesses.

To substantiate this argument, in a recent (2010) survey of spectators at Lord's Cricket Ground, more than 80% thought that sports venues should behave in an environmentally friendly way and 95% said that they would be willing to cooperate with a venue's efforts to be more environmentally friendly. So how should we meet these expectations?

The first step is to understand exactly what it is you are confronting. Sustainability is broad and it pervades everything that you do. It should never be a 'bolt-on' at the end of the process; it has to be part of the process, part of what you do, which often requires a change of attitudes and this can take time. In my current position as Sustainability Manager at Lord's, I consider issues in relation to seven categories; waste, utilities use (including greenhouse gas emissions), materials and procurement, transport and communication, health and welfare, community and charity, and biodiversity. An overarching factor is management and education. Some of these areas are not my direct responsibility and some have more significant impacts than others. The 'maturity' of each category is considered in terms of a sustainability progression; the steps are not necessarily exclusive, but they do give a logical progression in improving performance. An example for waste management is given in the table below:

1. Do nothing	No attempt to reduce the amount of waste; mingled waste; no recycling; all waste going to landfill.
2. Internal management	
2a. Manage the end of the process	Set targets to reduce waste; dispose of waste in separated waste streams, maximise recycling and minimise landfill.
2b. Manage the whole internal process	Manage waste production (not just disposal). Staff self-sort waste. Consider waste production in procurement decisions.
3. External engagement	
3a. Engage business stakeholders	Inform stakeholders. Require contractors to use environmentally friendly, recycled and/or recyclable materials. Reduce and/or send back packaging to suppliers.
3b. Engage public, media and community	Publicise performance. Publicly report and feedback information. Create recycling initiatives for the local community.

We have had some success in recent seasons at Lord's in improving our waste management. We have three interlinked objectives: to reduce the amount of waste produced (measured per spectator); to increase recycling; and, to reduce waste to landfill. Along with our waste management contractor we have achieved zero waste to landfill for the 2010 season (notwithstanding an inert fraction of ash that does go to landfill). Waste that previously went to landfill now goes to produce 'refuse derived fuel', a waste-to-energy initiative that reduces the use of fossil fuels in generating electricity. Of course, incineration of waste does throw up other environmental issues; but, in terms of carbon dioxide, the fuel replaces equivalent quantities of fossil fuel effectively off-setting the emissions.

Our challenge now is to increase recycling; no easy task as this requires affecting the behaviour of a crowd that may not be expecting to see self-sort recycling stations in a sports ground. With landfill taxes increasing annually, there is a clear business case for managing waste more effectively, and this is generally true across the board for all sustainability issues as initiatives generally relate to greater efficiency.

The other six categories are developed to a greater or lesser degree of maturity; we are by no means perfect and there are always opportunities to improve. Ultimately, for Lord's Cricket Ground – and potentially other sports stadia – sustainability equates to efficiency, responsible stewardship and longevity; it is a way of thinking that encompasses economic, environmental and social issues to ensure future survival.

References

- Babiak, K & Wolfe, R. (2009). Determinants of corporate social responsibility in professional sport: Internal and external factors. *Journal of Sport Management*, 23, 717-742.
- Crabb, J & Ratinckx, L. (2005). The healthy stadia initiative. North West Public Health Team, Department of Health (UK).
- Dobbinson, S.J. Hayman, J.A. Livingston, P.M. (2006). Prevalence of health promotion policies in sports clubs in Victoria, Australia. *Health Promotion Int*, 21, 121-129.
- Donaldson, L & Donaldson R. (2003). *Essential Public Health*, Second Edition (Revised). Oxford: Radcliffe Publishing.
- Dooris, M. (2004). Joining up settings for health: a valuable investment for strategic partnerships? *Critical Public Health*, 14, 37-49.
- Griffiths, J. Rao, M., Adshead, F. and Thorpe, A. (Eds). (2009). *The Health Practitioner's Guide to Climate Change: Diagnosis and Cure*. London: Earthscan.
- Griffiths, J. & Stewart, L. (2008). *Sustaining a Healthy Future*. London: Faculty of Public Health.
- Haig, M & Crabb, J. (2006). *Healthy Stadia Report 2005/06*. Liverpool: Heart of Mersey.
- Ireland, R & Watkins, F. (2010). Football fans and food: a case study of a football club in the English Premier League. *Public Health Nutrition*, 13:682-687. Cambridge University Press.
- Jackson, N.W. Howes, F.S. Gupta, S. Doyle, J.L. Waters, E. (2005). Policy interventions implemented through sporting organizations for promoting healthy behaviour change. *Cochrane Database of Systematic Reviews*, 2, CD004812.
- John, G. Sheard, J and Vickery, B. (2007). *Stadia: A Design and Development Guide* (4th Edition). Oxford: Architectural Press (Elsevier).
- Kokko, S. (2010). *Health Promoting Sports Club*. Studies in Sport, Physical Education and Health 144. Jyvaskyla: University of Jyvaskyla.
- Lister-Sharp D, Chapman S, Stewart-Brown S, Sowden A. (1999). Health promoting schools and health promotion in schools: two systematic reviews. *Health Technology Assessment* 1999;3 (22).
- Parker, M & Ireland, R. (2007). *Sports Stadia and Community Health*. Annexe 1: Description of the Action. Proposal to the Public Health Executive Agency of the Health and Consumer Protection Directorate of the European Union. Unpublished.
- Pelikan, J.M. Krajic, K. Dietscher, C. (2001). The health promoting hospital (HPH): concept and development. *Patient Education and Counselling*, 45, 239-243.
- Schmidt, C. (2006). Putting the Earth in Play: Environmental Awareness and Sports. *Environmental Health Perspectives*. 2006. 114(5): A286-A295.

- Smith, A. & Westerbeek, H. (2004). *The Sport Business Future*. London: Palgrave Macmillan.
- Smith, A. & Westerbeek, H. (2007). Sport as a Vehicle for Deploying Corporate Social Responsibility, *Journal of Corporate Citizenship*, 7(25): 43-54.
- Whitehead, D. (2006). The health promoting prison (HPP) and its imperative for nursing. *International Journal of Nursing Studies*, 43, 123-131.
- Whitelaw, S. Baxendale, A. Bryce, C. Machardy, L. Young, I. Witney, E. (2001). 'Settings' based health promotion: a review. *Health Promotion International*, 16, 339-353.
- WHO (World Health Organisation) (1986). *Ottawa Charter for health promotion*. Copenhagen: WHO European Regional Office.
- WHO (World Health Organisation) (2003). *Health and Development through Physical Activity and Sport*. Geneva: WHO.