



Spotlight on health and safety:
Contrasting performance in the waste
and recycling industry



environmental
services
association

1 > Foreword

The waste management industry can often present a challenging work environment with a high degree of interaction between workers and machinery, while out on the public highway exposure to moving traffic introduces further risk. In addition, a whole host of different stakeholders - including local authorities; the private and third sectors; SMEs; and others - all offer waste management services to the UK's home and businesses. This introduces an additional layer of complexity as the industry (and HSE) is often challenged to ensure that such wide and disparate parties are working to the highest (and common) health and safety standards. Unfortunately, factors such as these have contributed to a continuing poor health and safety record for the waste industry as a whole, with an injury rate which has tended to remain stubbornly higher than the all-industry UK average.

HSE's recent injury statistics report made for rather sobering reading, with a reported injury rate of 1800 (per 100 000 employees) for the waste industry as a whole and with little sign of meaningful improvement in injury reduction on the year before. We believe HSE was right to shine the spotlight on the industry's performance, which we hope provides the catalyst for improvement and encourages all within the industry to do more to work towards zero harm.

One key aspect that is perhaps not evident from HSE's official statistics is the considerable variation in health and safety performance that exists within the waste management industry. HSE compiles injury data from a diverse range of organisations carrying out a wide range of activities to produce a high level, aggregated total for the industry as a whole. While this data serves its purpose in allowing HSE to compare the performance of each of the UK's industrial

sectors, it unfortunately proves less useful in helping to identify the actual risk profiles across the waste industry's different activities, or to help reveal which part of the industry would benefit most from targeted intervention.

For that reason, ESA collects more detailed injury statistics from its Members to underpin our health and safety committee's programme of work and to assist our Members' concerted effort to improve health and safety performance. This data shows that ESA Members' health and safety performance has improved dramatically since the launch of our Accident Reduction Charter in 2004, with an 86% reduction in injuries over that period. Analysis of HSE's corresponding injury data shows that, year on year, this level of injury reduction is simply not being matched by others in the industry.

This report makes recommendations to raise health and safety standards across the whole of the waste sector and to spread best practice as widely as possible.

ESA is of course aware that we all have much more to do to meet our ambition of zero harm and that despite our remarkable progress, ESA's injury rate still remains higher than other industrial sectors. With that in mind, ESA is committed to continued improvement in our Members' health and safety performance and will ensure that best practice and 'lessons learnt' developed by our Members are disseminated widely across the industry for the benefit of all. However, for this to work, a stronger health and safety culture needs to be embedded across the industry whereby health and safety is interwoven into an organisation's decision making process and individuals at all levels are empowered to engage in health and safety improvements.

2 > A wide range in health & safety performance

The waste management industry is at the heart of the UK's journey towards higher rates of recycling and more efficient use of material resources. With ever more material collected for recycling the challenge for the industry is to ensure that higher rates of recycling continue to be matched by high standards in health and safety. This is a challenge: the sheer pace of change experienced by our industry, with ever more innovative approaches to meeting increasingly stringent recycling targets has seen the deployment of new technologies, techniques and working practices. These in turn have introduced new risks into the workplace.

The collection of waste from the kerbside is perhaps one of the most high risk aspects of all the industry's activities. ESA's data reveals that such activities accounts for nearly half of all injuries, with slips, trips and falls (from working in and around refuse collection vehicles) and manual handling injuries (when moving heavy waste containers for uplift) accounting for most injuries. Workers are also exposed on a daily basis to the inherent hazards and risks of working on the public highway.

Factors such as these have resulted in a stubbornly high injury rate for the waste and recycling industry. The sheer diversity within the waste management industry, arguably one of the most diverse of all the UK's industrial sectors, perhaps helps to explain why the health and safety record of the waste industry continues to lag some way behind that of other sectors.

The industry encompasses a wide range of facilities and operations with everything from the highly specialised, process-based installations (such as energy from waste, gasification and anaerobic digestion) to more manual and labour-intensive sorting of mixed recyclables in material recovery facilities.

Furthermore, a whole host of players within the industry compete for and provide waste collection services to the UK's homes and business, which adds an additional layer of complexity. These include local authorities, the private sector (ESA and non-ESA Members), the third sector, SMEs and others. With waste collections conducted by such disparate organisations, it can be difficult to ensure all are actively engaged in the health and safety agenda and are working consistently to the same high health and safety standards.

ESA has long voiced concern that health and safety performance varies widely across the waste industry, and that the reduction in injuries achieved by ESA Members in recent years is simply not being mirrored across the industry as a whole. There is certainly no room for one-upmanship when it comes to health and safety, but it is clearly in everyone's interests that poor performers are the focus of targeted improvement; encouraged to share in the benefits of best practice; and are brought up to the same standard as the better performing elements of the industry.



3 > The waste & recycling industry at a glance

The UK's waste and resource management industry provides services which are essential to modern life. Employing over 80,000 people and with an annual turnover of £11 billion, the companies that make up the sector collect waste produced by households and businesses across the UK, treat the waste responsibly, and turn that waste into new resources and energy for the nation. Innovation is a key driver for the modern waste and resources industry and we are at the forefront of debates about waste prevention and recycling.

- Total turnover: **£11 billion**
- Direct employment: **80,000 people**
- Municipal waste handled each year: **over 26 million tonnes**
- Energy generated (from waste combustion and landfill gas) each year: **approximately 6,700 GWh**, 1.5% of the UK's total electricity supply and around 20% of our renewable electricity.
- Greenhouse **gas emissions down by 70% since 1990.**
- The **top seven companies account for approximately 40% of turnover.** Many hundreds of SMEs provide either localised or more specialised services



4 > Contrasting health and safety performance

The Health the Safety Executive (HSE) provides the official source of health and safety statistics for the waste and recycling industry, with its most recent figures for 2016/17 showing a (provisional) RIDDOR¹ injury rate of 1801 (per 100,000 employees). While this represents a 3% decrease in injuries on the previous year it is nonetheless clear that overall the industry has made little in the way of meaningful progress in reducing injuries in recent years.

However, one of the main shortcomings of HSE's dataset is that it simply provides an indication of the health and safety performance based on a single SIC code for the industry as a whole and offers little insight into how one part compares against another (for example, contracted collection services as compared to the same services delivered in-house, or waste collection against waste composting activities).

HSE's statistics nonetheless reveal fatalities in the industry to be around 15 times higher than the all-UK industry average, with 39 worker fatalities recorded since 2012². Five of those tragic incidents can be attributed to ESA Members who, to set this in some context, together employ more than a third of all those working across the sector.

However, regardless of which way these figures are interpreted they are clearly too high and have been one of the main drivers behind ESA's commitment to continued improvement in health and safety. This includes: a dedicated health and safety committee; an Accident Reduction Charter; and Strategy. ESA also collects and compiles health and safety data from its Members and this data collection initiative, having evolved over 20 years, provides a robust and comprehensive indication of ESA Members' performance and offers a clearer insight into some of the underlying trends (such as accident causation and injuries across operational activities) than the more limited, high-level data made available by HSE.

In fact, since the launch of ESA's Accident Reduction Charter in 2004 (which commits ESA to year-on-year 10% injury reduction targets) ESA Members have reduced injuries by over 85%. ESA Members' RIDDOR rate now stands at 577 per 100,000 employees, our lowest yet and is down 37% in the two years since 2014.

This remarkable achievement is not reflected in HSE's published statistics, which shows that in the same period³ when ESA achieved its 37% reduction in injuries, the industry as a whole notched up a 3% increase in injuries. The industry's (provisional) aggregated 2016/17 RIDDOR rate (1801 per 100,000 employees) is three times higher than ESA's injury rate.

With ESA Members accounting for more than a third of all those employed in the industry, it is clear that some of this best practice is not being replicated across the sector, which is dragging down the overall industry average in HSE's statistics.

Taking a slightly wider perspective, and examining data trends over the longer term, reveals a similar pattern to that above, with the 70% reduction in injuries achieved by ESA Members between 2009-2016 not fully reflected by the whole-sector average (20% reduction).

The following graphs help show ESA's sustained effort in reducing the incidence of injury and harm.

Recommendation 1

HSE should consider disaggregating private and public sector injury statistics to allow for more meaningful comparison and for resources to be more effectively targeted on areas of greatest risk.

¹ The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) is the primary indicator used by HSE and the industry for notifying and recording work related injuries

² <http://www.hse.gov.uk/statistics/industry/waste-recycling/waste-recycling.pdf>

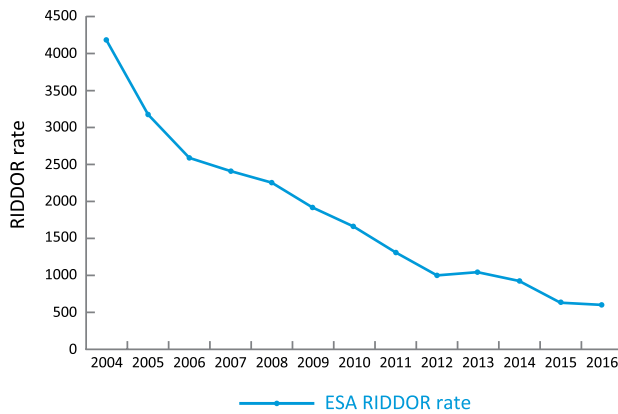
³ It should be noted that HSE reports injury data for the financial year, while ESA uses the calendar year

5 > Summary of injury data

While ESA clearly has more to do to achieve our ambition of zero harm, we continue to move forwards and are working hard to continue improvements. In fact, as shown from the

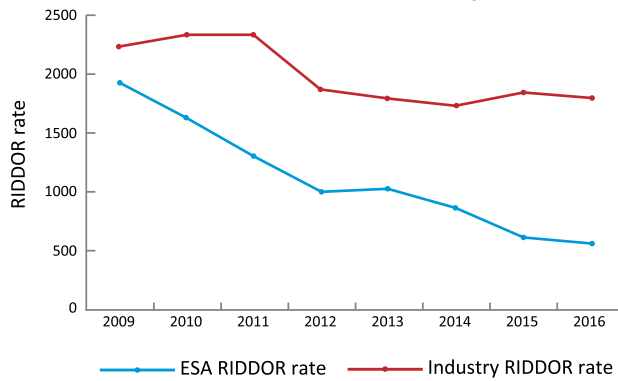
graphs below ESA's health and safety performance far exceeds the wider waste management sector average.

Fig 1: ESA's injury rate



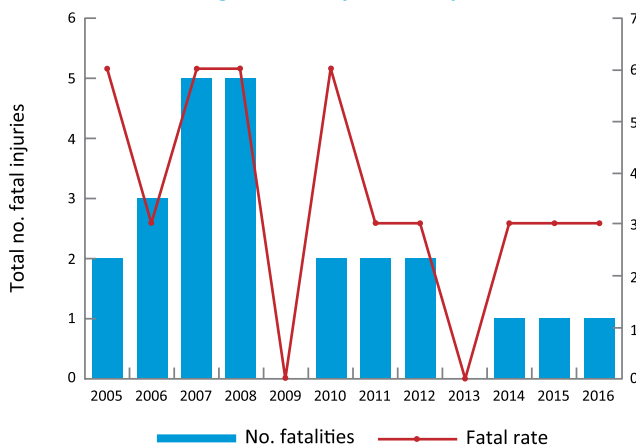
ESA Members have reduced RIDDOR reportable injuries by more than 85% since the launch of ESA's Accident Reduction Charter in 2004.

Fig 2: comparison of ESA's injury rate with the rest of the waste industry



ESA Members perform well against the waste management sector average, with ESA's 70% reduction in injuries since 2009 not fully reflected in HSE's aggregated figures.

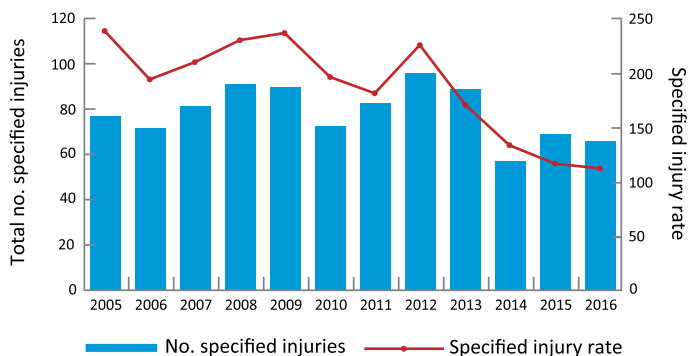
Fig 3: summary of fatal injuries



The relatively small number of fatal incidents makes it difficult to identify trends. However, it is clear that ESA still has some way to go to achieving our ambition of zero harm.

While there is clearly variation in the number of specified injuries there is an overall downward trend in such incidents.

Fig 4: summary of specified injuries



The decline in over-3 (and then 7) day injuries has been a key contributory factor to ESA's overall reduction in injuries. Changes were introduced from 2013 to the reporting of over 3 day injuries, with ESA's data reflecting the new reporting requirements.

Fig 5: summary of over 3 and 7 day injuries

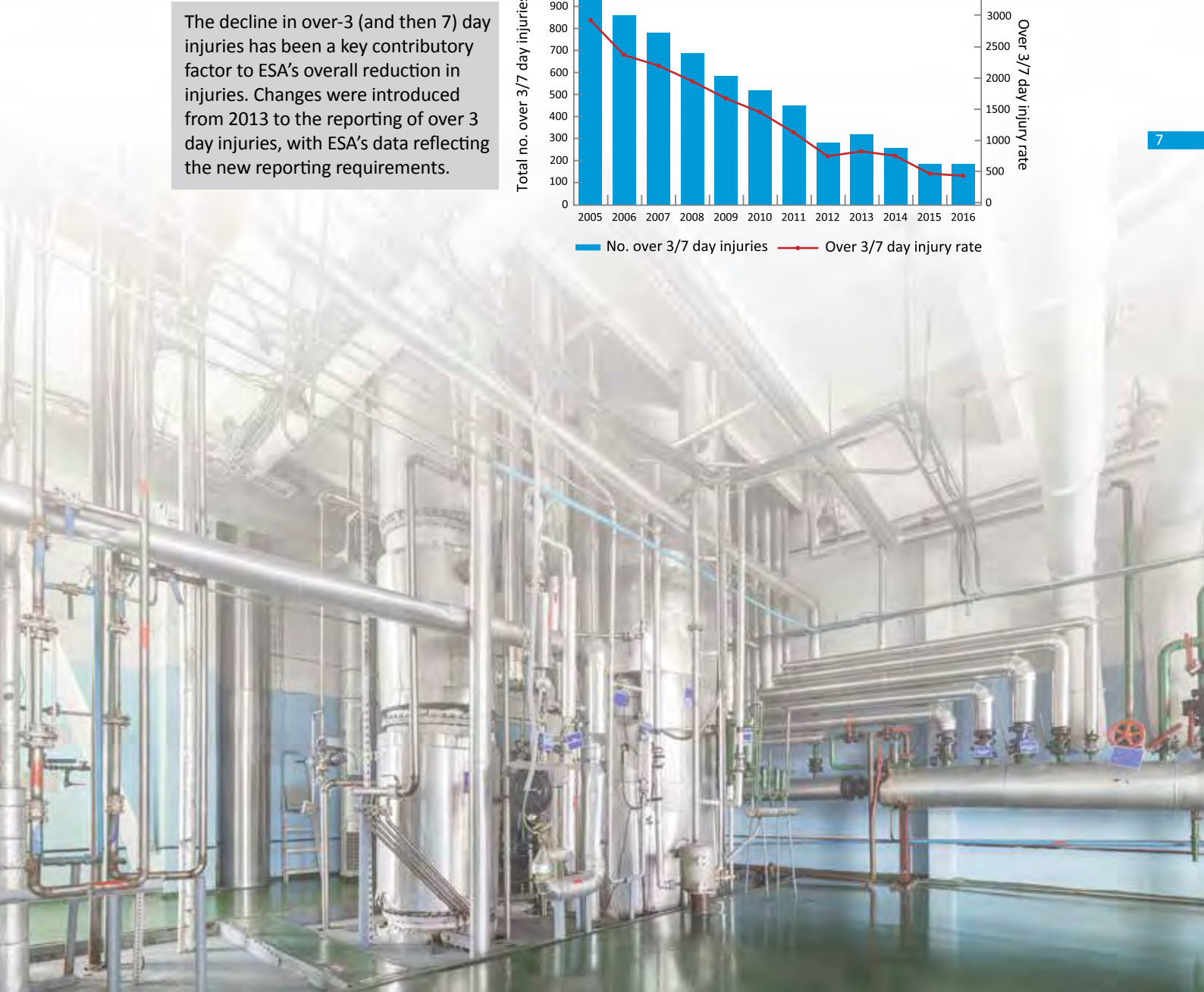
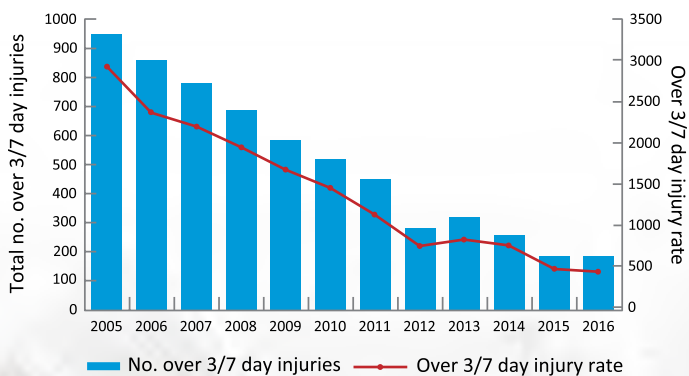
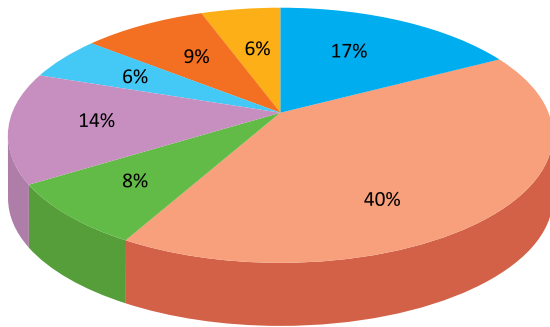


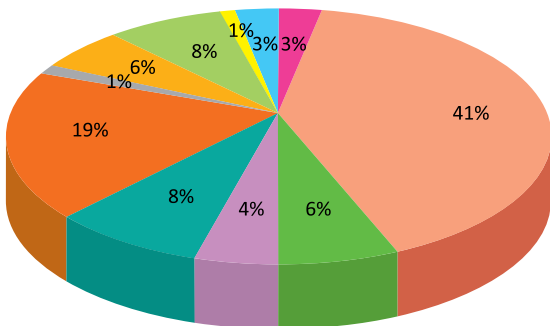
Fig 6: injury causation - non-fatal injuries



- Impact (17%)
- Slips, Trips and Falls (40%)
- Vehicle / Plant (8%)
- Manual Handling (14%)
- Needlestick / Cuts (6%)
- Falls from Height (9%)
- Misc (6%)

Slips, trips & falls were responsible for 40% of all non-fatal injuries reported by ESA Members in 2016. Together, slips, trips & falls; manual handling & impact injuries made up over 70% of all reported incidents. There has been little variation in this trend between previous reporting years.

Fig 7: injury by activity



- Landfill (3%)
- Refuse Collection Vehicle (41%)
- Skip / Roll on off (6%)
- Workshop / Maintenance (4%)
- Transfer Station (8%)
- Treatment (19%)
- EfW (1%)
- HWRC (6%)
- MRF (8%)
- Composting (1%)
- Other (3%)

Waste collection activities remain the most hazardous aspect of the waste management industry's operations, with nearly half of all non-fatal injuries in 2016 associated with such activities.



6 > Embedding the highest standards

The waste industry is comprised of many distinct parts and covers a diverse range of activities. The waste collection landscape has a wide range of delivery bodies with services carried out through a variety of different methods. Around half of local authorities provide an in-house waste collection service⁴ with various delivery mechanisms used to suit local circumstances (Direct Service Organisations (DSO); a joint venture; partnership with other authorities; or Teckal exemption).

Analysis of the data sources available to ESA suggests that the health and safety performance of the UK's leading waste management companies is not being matched across the rest of the sector. It is vital that more granular data is collected and published by HSE to help us all to understand the sources of the discrepancy. The reality is that the overall picture will remain unclear until such time that HSE publishes disaggregated injury data for the various sectors and processes within the waste management industry. Currently there appears little appetite or resource within HSE to enable this to happen. Until such time that this level of detail is available, and the risk profile of the entire industry is more transparent, then we must explore other avenues for ensuring that best practice, as exhibited by the top performing companies, is disseminated as widely as possible across the sector.

Effective and balanced procurement, which properly considers and prioritises health and safety performance, is one such option. Improved commissioning of services could enable high performing waste management companies to bring their wealth of experience of delivering similar contracts to innovate and drive health and safety performance upwards. Service provision contracts must also include strict provisions for monitoring and reporting over the lifetime of the contract. They must establish performance standards and targets that can be independently monitored and measured throughout the service provision period.

ESA welcomed the publication of HSE guidance, *Procuring and Managing Waste Services*, which aims to assist local authorities to embed health and safety into the procurement, design and management of waste management services. However, to date we note little evidence of substantive change to public procurement practices or an increased focus on health and safety performance as part of the selection criteria.

Recommendation 2

The right KPIs should be adopted to ensure that health and safety remains at the centre of service delivery

⁴ http://www.esauk.org/esa_reports/20160503_Public_Realm_Services_-_Making_the_Right_Choice.pdf

7 > Spreading best practise

One of the most effective means of driving up health and safety standards is through participation on relevant industry fora, which provide a platform for engaging with peers on the development of health and safety guidance and dissemination of best practice. The Waste Industry Safety and Health Forum (WISH) - and SWITCH in Scotland - exists to do just that.

The WISH Forum (of which ESA is a member) is a committee formed of representatives from different sectors across the waste and recycling industry. It serves as a forum for the exchange of information and to discuss and resolve prevailing health and safety issues with the aim of improving standards across the industry.

WISH is run by the industry and for the benefit of the industry. It is therefore vitally important that representatives from all parts of the sector are engaged in WISH and have the right mechanisms in place to ensure that outputs from WISH (such as best practice or new guidance) are disseminated back through the relevant organisations. Improving WISH engagement with the local government sector and with SMEs is therefore vital.

Local authorities of course exert considerable influence over the provision of waste collection services, either in providing services directly (i.e. in-house, or through Teckal exempt organisations) or in their role as 'client' in outsourcing services to a waste management contractor. By extension, this influence extends to 'designing in' health and safety into the procurement process and service delivery, and so it is therefore vitally important that local authorities are engaged in the health and safety agenda and the wider industry is able to benefit from their expertise in the drafting and sharing of best practice.

Recommendation 3

Improve representation and engagement of all parts of the sector with the WISH Forum

There is also a perception that HSE expends more time and resources scrutinising the operations of the larger waste management companies. Of course, it may reasonably be argued that this is due to the size and scale of the operations undertaken by these organisations, with many of these companies carrying out activities in high profile locations. HSE has a rolling programme – through its National Lead Inspector (NLI) Initiative – of targeting its inspections at some of the UK's largest waste management companies, including some of ESA's Members. This programme of intervention is in addition to HSE's routine inspection activities and is more in-depth, targeting key areas of risk within the company. There is no similar HSE programme of work directly involving the inspection of waste activities delivered by local authorities or by SMEs. Moreover, it would perhaps be of benefit to the wider industry (those not party to NLI) if any 'lessons learnt' from NLI could be communicated by HSE more widely. Presently, communication of findings and NLI outcomes tends to be a two-way process, between HSE and the relevant NLI company.

Recommendation 4

HSE should consider extending its NLI programme to include a broader range of organisations and should share its findings more widely

8 > The importance of raising standards

As previously noted, HSE's statistics are not sufficiently granular to distinguish between the health and safety performance of different sectors or activities within the waste management industry. The publication of its statistics, which year on year consistently points to one of the highest injury rates among all UK industries clearly reflects badly on the entire waste and recycling industry, regardless of the efforts by any one company or sub-sector to improve performance.

Without improvement, the industry could struggle to shrug off negative stereotypes: that it is dangerous and dirty work. If we want to attract and retain talented individuals, and showcase the variety of technical and skilled positions on offer then the industry needs to demonstrate that it is serious about creating a safe, healthy and rewarding place to work. This will prove challenging until health and safety standards are raised across the board, and with a corresponding improvement in the injury rate reflected in HSE's statistics. In today's business environment, where corporate social responsibility has come to the fore, such is an equally important consideration in maintaining and promoting investor confidence. It is this inward investment which helps deliver new infrastructure and waste services.

For its part, ESA has developed a health and safety strategy that focuses on improving ownership and leadership in health and safety and improving health and safety culture and behavioural safety. It also includes commitments towards improving health (rather than purely safety); providing support to SMEs; and remaining alert to emerging risks. Our strategy is closely aligned with both WISH and the HSE's sector plan and with a clear focus on tackling low frequency high severity incidents.

This is important: the industry's focus up until now has largely been on safety and raising safety standards to prevent harm and injury. The industry now recognises that there is more to be done to raise standards and improve education around health. There is clearly more work to be undertaken to understand the long term health implications of our sector's activities.

A further, and often overlooked aspect that merits further attention is the incidence of violence and aggression directed at workers by members of the public. Many of our industry's activities involve a high degree of public interaction, particularly kerbside collections and at household recycling centres. The UK's journey towards high quality recycling has placed greater emphasis on source segregation and ensuring materials are placed in the correct containers to reduce material contamination. The importance of such is not always fully appreciated by the public and who sometimes perceive waste operatives as being overly strict. This can lead to confrontation and in some cases this has escalated to violence. The harm and distress caused by such incidents is not reflected in the official health and safety statistics but is increasingly acknowledged within the industry as a growing concern.

HSE's waste sector plan encourages collaborative working between various stakeholders within the industry to raise standards, to which ESA offers its full support. However, perhaps one important aspect that is missing from this equation is encouraging greater information exchanges with other industrial sectors. Clearly, given the waste management industry's direction of travel and its broadening infrastructure portfolio there is much to learn from the experiences of others, particularly the logistics, manufacturing and energy sectors.

9 > Improving safety KPIs

Key Performance Indicators (KPIs) provide a useful means of managing the diverse risk profile associated with waste management activities and form a key component of contracts for waste services. Safety (and operational) performance can be assessed and reported through KPIs, and which are reviewed on a regular basis.

Performance can only be benchmarked against industry good practice if it is accurately reported and monitored. It is vital that all waste services, regardless of delivery body, are bound by safety KPIs. We therefore suggest that KPIs are integrated into all household collection services and that performance against these KPIs should be reported on an annual basis. This would present a more accurate picture of health and safety performance trends over time and would also strengthen local authorities' ability to benchmark operational performance against the market.

For best results leading indicators should be adopted, such as those which target training, staff surveys and audit score improvements. Once adopted and in place, KPIs can be improved through a combination of the following:

- **support from senior management**
essential in firstly securing the backing to implement the necessary changes towards an improved health and safety culture and then maintaining the momentum to see the changes through. Employees need to know that senior leaders take health and safety seriously.
- **adoption of a health and safety management system**
ideally based on a certified process such as OHSAS 18001
- **'ownership' of health and safety devolved to the individual-level**
employees should be involved in the decision making process at all times. Health and safety projects should be the responsibility of and

driven by relevant teams rather than purely seen as the domain of the boardroom

- **introduce feedback mechanisms**
a strong reporting culture should be promoted within organisations, not only for the reporting of accidents but also hazards and near misses. Employees who have reported an incident should receive a positive response, with details of measures to rectify any wrongs
- **improved behavioural safety**
simply having a robust and thorough set of controls and procedures in place is no guarantee of a better health and safety record without corresponding improvements in behavioural safety. Barriers to positive behavioural changes should firstly be identified and then overcome through strong governance.
- **communicating with positive messages**
an array of methods should be utilised, from traditional 'toolbox talks' to innovative uses of social media platforms to ensure key health and safety messages are conveyed to employees.
- **auditing**
internal auditing is essential to avoid complacency, while an audit from an external source is a useful means of gaining an independent perspective to further help prevent risks

10 > Promoting safe and healthy workplaces

ESA Members are committed to keeping their workplaces safe and healthy and minimising the risks to the environment from their day to day activities. Two of our Members, FCC Environment and Biffa were among 56 organisations worldwide to be awarded in 2017 the Sword of Honour from the British Safety Council. This prestigious award recognises winning organisations' resolve to achieve the highest standards in health, safety and environmental management and further recognises the vision within each organisation that no one should be injured or made ill at work.

Other ESA Member have embarked upon equally ambitious company initiatives to improve the health and safety culture within their organisation; reduce harm or unsafe behaviours; or target awareness around safer working practices. Examples include:

- Viridor: in 2017, the company announced a new vision and strategy for health and safety, designed to raise standards, prevent harm and create a culture of safety across its business. The new health and safety programme is call 'HomeSafe' and it represents a wide ranging agenda of consolidation and improvement, which focuses on people, process and the physical environment.

- Veolia: a programme of work to tackle acts of violence and aggression by members of the public towards staff.
- Cory Riverside Energy: a programme to reduce the incidence of injuries caused by sharp items in the waste stream.
- Biffa: DROPS campaign aimed at reducing acts of reckless and dangerous driving by members of the public on the pavement and, through a separate initiative, raising awareness of the risks posed to people by seeking refuge in bins.

Examples such as these point to a maturing industry that is seeking to adopt a more holistic and collaborative approach to improving health, safety and protection of the environment for the benefit of the wider sector, the public and the collective workforce. It is increasingly recognised that successful implementation of such an approach requires the forging of a health and safety culture within a company, where health and safety is interwoven into the day to day operations and strategic decisions, and where health and safety is the responsibility of all, rather than any one individual.



11 > Working together towards zero harm

Health and safety of our workforce should be of the utmost importance to all of us working in the waste and recycling sector. We need to embed a health and safety culture across all organisations delivering waste services and we need to work together to share best practice and to raise standards for all.

List of recommendations:

- 1.** HSE should consider disaggregating private and public sector injury statistics to allow for more meaningful comparison and for resources to be more effectively targeted on areas of greatest risk.
- 2.** the right KPIs should be adopted to ensure that health and safety remains at the centre of service delivery
- 3.** improve representation and engagement of all parts of the sector with the WISH Forum
- 4.** HSE should consider extending its NLI programme to include a broader range of organisations and should share its findings more widely

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