



CHEMICAL INDUSTRIES  
ASSOCIATION

# UK CIA Sustainable Health Metrics Indicator Tool



A tool to promote establishing a sustainable healthy workplace



Responsible Care

### **One easy to use tool...**

- Simple questionnaire enables self-assessment and reporting of key aspects of preventive performance of workplace health programmes
- Encourages continual improvement
- Provides performance rating with state of achievement
- Promotes understanding of CIA Responsible Care expectations
- Permits analysis and presentation of leading health metric data to management to further motivate investment in prevention programmes.

## FOREWORD

**Protecting the health of your employees is at the heart of every sustainable business, regardless of the industry sector you belong to.** The benefits to a business from a healthy workforce are obvious in terms of not only financial savings from reducing sickness absence and staff turnover but are also likely to bring improved morale and definitely even increased productivity.

*Why should you consider using a health metric tool?*

The answer is simple – companies using this tool should ultimately expect to see an improvement in their health performance together with business benefits.

CIA's Sustainable Health Metrics Tool promotes establishing a sustainable healthy workplace and can be used as either an "off the shelf" tool or be incorporated into an integral part of a company's health programme to facilitate continuous improvement. Our tool can equally be applied to all parts of your business from the production facilities to the offices and warehouses. More importantly it is designed to be able to be used by any company or organisation, whatever the size, to help improve their health performance.

I would like to thank the Health & Safety Executive (HSE) in particular for their support in finalising this guidance document and those CIA members who have contributed to the design of our new health metric tool. In particular, I would like to thank Johnson Matthey who kindly undertook the pilot study resulting in the tool being rolled out globally across their organisation. This is a great endorsement for the tool in itself!

I am therefore delighted to commend this best practice tool and am certain that you will find this a useful tool to help improve your own occupational health systems by either incorporation of elements from this or using it in its entirety.

**Steve Elliott**  
**Chief Executive, Chemical Industries Association**

**The workplace can have a significant impact on people's health, especially where exposure to hazardous substances is poorly managed.** As well as reducing the consequences for those affected and their families, tackling ill-health issues in the chemical manufacturing sector makes good business sense; it reduces the costs of failure and the impact on productivity. Good health and safety is good for everyone.

This helpful Indicator Tool demonstrates the Chemical Industries Association's (CIA) welcome and continuing commitment to developing sensible and effective solutions to help businesses manage workplace risks by actively monitoring performance and responding to what they find. On behalf of the Health & Safety Executive (HSE) and the joint industry-regulator Chemical and Downstream Oil Industries Forum, I support the CIA's ongoing efforts in this area, and would encourage others to follow their lead.

**Peter Baker**  
**Deputy Director, Health & Safety Executive Hazardous Installations Directorate**  
**Chair, Chemical and Downstream Oil Industries Forum**

## Ill health – the effect on business

Ill health is a major cost to any business and should, if not already, be a strategic priority within any company's business plan. In just 2009/2010 alone, the Health and Safety Executive's statistics recorded that 23.4 million days were lost due to work-related ill health. Musculoskeletal disorders and stress were the most common cause. It is increasingly being recognised that proactive management of employees' health and well being does not just protect their health, but also reaps benefits to the business as a whole in terms of financial costs by reducing the level of sickness absence, lowering staff turnover, improving morale and even productivity.

## Why use a health metric tool?

By working towards achieving a healthy sustainable workplace, companies using this health metric tool should ultimately expect to see an improvement in their health performance together with the business benefits mentioned above.

The tool will:

- Provide clarity of CIA expectations for member company Responsible Care health programmes linked to performance ratings in one easy to use tool;
- Enable a facility/facilities to identify priorities for health programme improvement and monitor their own performance e.g. during annual health review and improvement planning processes;
- Help focus on measuring preventative programme performance; and
- Allow comparison between facilities, for where there is more than one operation, as well as analysis of trends by business division and geographically.

The new self-verification health tool developed by the Chemical Industries Association's (CIA) Health Network is an active part of the next phase of the CIA's long-established commitment to building a sustainable UK chemical industry for the benefit of society at large. It has built on the foundations stemming from CIA's successful 2004-2010 Health "check-up" initiative, by developing its focus on systems relating to health, best practice sharing, provision of technical advice and support, and so taking CIA and its members to a higher level in health management.

It also forms part of the chemical industry's commitment to Responsible Care, which strives to help all to improve and raise health, safety and environment standards throughout industry.

Following the high-level of interest received from external stakeholders, the CIA is now launching this as a stand-alone tool to aid all businesses to develop sustainable healthy workplaces.



Responsible Care

## What is the tool?

The tool focuses on health in the workplace to assist companies in building a sustainable and healthy workplace. Users of this proactive tool are able to check and score their own health programmes against a number of elements, thus enabling them to identify areas for improvement. Following the introduction of interventions and lapse of a suitable time period for these to take effect, the tool can be run again to check whether the changes have resulted in the desired beneficial health outcomes. It can be used as either an “off the shelf” tool or be incorporated into an integral part of a company’s health programme to facilitate continual improvement.

- The tool uses two sets of Metrics: Sustainable Health Leading Indicators Questionnaire; and
- Performance Lagging Indicators.

*Sustainable Health Leading Indicators Questionnaire (Annex I and II):* This will explore how you manage your facility’s occupational health programme. Instructions on using the questionnaire are provided in Annex I.

*Performance Lagging Indicators:* These are a check on the health performance of your organisation, and in conjunction with the leading indicators, can highlight areas that are working well, or that could need further attention.

## What are Health Leading Indicators?

Leading indicators are used as a measure of an activity to prevent avoidable health events. Within the questionnaire, leading indicators are those systems that companies should have in place to achieve a sustainable healthy workplace. The systems are designed to initially ensure a company workplace is compliant with legislation and secondly to encourage the user to go beyond compliance. The systems (or leading indicators) are as follows:

- Health Leadership;
- Health Organisation;
- Health Hazards and Exposure Control;
- Health Exposure Monitoring; and
- Health and Business Performance.

For legal compliance, your occupational health programme must contain elements of all of the following systems:

Health Leadership, Health Hazards & Exposure Control and Health Exposure Monitoring.

Within these systems, questions are asked on fourteen components of occupational health (see Table 1). Each component or aspect of a company’s health programme is then rated against four given descriptor levels, assigning the most appropriate that their facility meets. These levels are A = Advanced (highest level), B = Best Practice, C = Controlling, D = Developing (lowest level). The results are visually represented within the “Sustainable Health Leading Metric Scorecard” that can be found in Annex II. The colour coded scorecard enables easy identification of target areas for improvement.

### Health leadership:

- Leadership

### Health organisation:

- Health policies and procedures
- Records
- Auditing

### Health hazards and exposure control:

- Information, instruction and training
- Workplace health hazards and risks to health
- Control of chemical exposure
- First aid and initial treatment
- Emergency response

### Health exposure monitoring:

- Exposure monitoring
- Health surveillance

### Health and business performance:

- Wellness support programmes
- Absence case management and rehabilitation programmes
- Health promotion and education

Table 1. Health programme components.

## What are Health Lagging Indicators?

Lagging indicators measure the occurrence of undesired health events and can identify performance trends as a check that leading indicators are adequately protecting employees' health. These can be pretty much anything provided that it can be measured and quantified. Since the tool was originally designed for the chemical industry, the following performance lagging indicators are suggested (but may require minor modification to meet your own needs).

CIA uses the following to measure its performance on an annual basis:

- Specific conditions related to workplaces making

and/or using chemicals: occupational asthma and occupational dermatitis rates per million working hours (number actual reported illnesses/number actual hours worked by the population at risk multiplied by 1,000,000);

- Occupational illness frequency rate per million working hours (number actual reported illnesses/number actual hours worked by the population at risk multiplied by 1,000,000); and
- Days lost to occupational illness.

Other examples of lagging indicators (not used by the CIA) include workers compensation claims and medical termination of employment. Rates can also be determined per number of workers e.g. per 100,000 workers.

### Johnson Matthey case study

The CIA sustainable health leading indicators questionnaire and scorecard was adapted for use in Johnson Matthey (JM) and evaluated by a pilot programme in April 2010. In total, 80% of JM's global facility management teams participated in the pilot evaluation. The mean score rating for the usefulness of the scorecard to help identify how well health programmes at the site level are meeting JM corporate requirements was 7.5 (on a scale of 0 to 10; 10 being the top score). Over 70% of the facility teams believed the scorecard would help them to manage their health programmes more effectively and a similar proportion thought the time and effort involved in completing the scorecard was exceeded by the potential benefits from achieving programme improvements as a result.

Based on the successful pilot programme, completion of an annual the scorecard annually by all facility level management teams was introduced as a JM corporate requirement in March 2011. The leading metrics data from completed scorecards has been analysed and the proportion of sites that have achieved a "best practice" level of performance for the 14 key health programme performance indicators has been presented to divisional management. This data has helped identify priorities, such as ergonomic risk management and internal auditing of health programmes, to improve JM's health programmes both regionally and within the group's three divisions.



### The tool – taking it further...

The tool itself is designed to allow flexibility and evolve to meet the needs of your business. For example, some users may also wish to set targets for the leading indicator systems and measure where they are positioned each year for each of these. For example, a target could be that by the year 2015 your health programme must meet level B for all five leading indicator systems. Tracking of improvements is straightforward to do and can be represented in a graphical format. The team who developed this tool particularly favoured a "Health Wheel", a pentagon showing the percentage of sites achieving the set targets; this is represented in Figure 1.

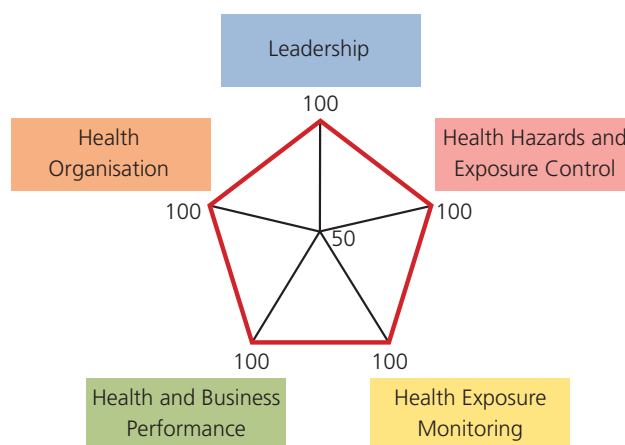


Figure 1. Health wheel representing a company's health programme.



## ANNEX 1 – SUSTAINABLE HEALTH LEADING INDICATORS QUESTIONNAIRE

Under each of the systems (leading indicators) you will find a number of questions that have been designed to probe your site/company's health programme. Each question together with the descriptions for each level should be carefully considered before selecting the most appropriate grade: A = Advanced, B = Best Practice, C = Controlling, D = Developing.

Inputs and views should be sought from the facility management team, Environment, Health & Safety adviser, Human Resources adviser, Occupational Health service provider and others where relevant. In cases where your facility could fit into either of two grades, the "best

fit" level should be selected. If there is no exposure to chemicals, question 7 does not apply and where there are no indications for exposure monitoring or health surveillance, then questions 10 and 11 do not apply either. All other questions apply to any type of facility. A comments box is provided under each question for your own use.

We recommend the use of the "Sustainable Health Leading Metric Scorecard" provided in Annex II to record your answers. Companies with more than one site should ideally complete a separate scorecard for each facility.

### Questions:

#### SYSTEM: Health Leadership (Legal requirement for occupational health)

Q1. How would you best describe health leadership on your site?

(A) Managers (from the most senior down) show personal leadership of and involvement in health improvement via communication, performance monitoring and objective setting. Senior managers promote health management principles both internally and externally.

(B) Senior managers are aware of best practice, and are visibly involved in the promotion and communication of health issues. They lead by example having a shared understanding of health risks and give active support to continuous improvement in health management.

(C) Senior managers are involved in health and safety and ensure systems are effective and reviewed by others. They support recommendations made by health and safety advisers.

(D) Senior managers are not routinely involved in health management issues, delegating this to the health and safety adviser for health management. Little or no active support for health objectives.

Comments:

**SYSTEM: Health Organisation****Health Policies and Procedures****Records****Auditing**

*Q2. How would you best describe your policy and practice for health?*

(A) In addition to (B), responsibility and accountability emphasised in performance evaluation of managers. Formal business review and planning process in place for health programmes. Health performance metrics and improvement plans formally reviewed periodically by senior management.

(B) The Health policy adequately addresses key health risks associated with the business and is fully publicised to all employees. Roles and responsibilities for health management formally identified and documented.

(C) A General understanding of health responsibilities and accountabilities but not formally recorded.

(D) No written health policy. Responsibility for health not assigned.

*Q3. How would you best describe your position on occupational health and hygiene records?*

(A) Procedure implemented for review of data and for maintenance and improvement of system. Data is analysed and health trends reported back to management as formal business health metrics.

(B) In addition to (C), records are readily accessible and appropriately managed.

(C) Appropriate records are maintained and securely stored.

(D) No formal system and no readily accessible records.

*Q4. How would you best describe your internal auditing programme?*

(A) Regular audit with performance review using standard indicators. External benchmarking. Plans for continuous improvement.

(B) Regular internal audit using standard documented procedure.

(C) Internal audit on an ad-hoc basis but no detailed documentation or strategy.

(D) No internal audit.

Comments:

Comments:

Comments:



**SYSTEM: Health Hazards & Exposure Control (Legal requirement for occupational health)**

Information, Instruction and Training	Workplace Health Hazards and Risks to Health	Control of Chemical Exposure
<p><i>Q5. How would you best describe your position on the provision of information, instruction and training for employees on workplace health hazards issues?</i></p> <p>(A) In addition to (B), Systems, material and competence are subject to formal review to ensure continuous improvement.</p> <p>(B) Information on all hazards is critically evaluated, instructions included in standard operating procedures, scheduled training programme fully implemented.</p> <p>(C) Systems in place to provide appropriate information, instruction and training with documentation relevant to workplace health risks.</p> <p>(D) Limited systems and retrievable material for providing information, instruction and training.</p>	<p><i>Q6. How would you best describe the assessment and control of all types of hazards to health and attendant risks on your site, i.e. including hazardous substances, physical agents, ergonomic hazards, etc?</i></p> <p>(A) Regularly benchmark risk control techniques with other organisations. Systems in place for measuring performance.</p> <p>(B) In addition to (C), can demonstrate continual improvement through comprehensive auditing programmes.</p> <p>(C) Hazards identified, risks evaluated by trained personnel. Essential actions to maintain risk control identified. Areas for remedial action identified and tracked to completion.</p> <p>(D) Limited risk assessment completed but significant further work needed to achieve adequate control of exposure/risks.</p>	<p><i>Q7. How would you best describe your systems to control of exposure to workplace chemical health hazards on your site?</i></p> <p>(A) Recommendations fully implemented, as far as is reasonably practicable, with minimal or no dependence on personal protective equipment (PPE). Action taken to reduce risk at exposure levels well below current regulatory occupational exposure limits and exposure levels only occasionally found to be above these limits.</p> <p>(B) Assessed the need for comprehensive exposure monitoring programmes, implemented where necessary. Documented exposure performance to assist with continuous improvement. Recommendations from health risk assessments fully implemented, as far as is reasonably practicable. Minimal or no dependence on personal protective equipment (PPE).</p> <p>(C) General understanding of principles of control of exposure to health hazards, evidence of compliance with occupational exposure limits. Can demonstrate efficacy of risk management controls e.g. LEV. Some dependence on PPE to achieve adequate exposure control.</p> <p>(D) No clear strategy for control of exposure, little data on compliance with occupational exposure limits (e.g.WELs, noise limits and HAV exposure action/limit values). Significant reliance on (PPE) to achieve adequate exposure control.</p>
<p>Comments:</p>	<p>Comments:</p>	<p>Comments:</p>

**SYSTEM: Health Hazards & Exposure Control cont. (Legal requirement for occupational health)**

**First Aid and Initial Treatment**

**Emergency Response**

*Q8. How would you best describe your first aid arrangements?*

*Q9. How would you best describe your health emergency response plan on your site?*

(A) First aid programme subjected to formal audit at regular intervals. Regular simulation exercises of first aid response conducted as part of major site emergency incident rehearsals. Some degree of general first-aid awareness training made available to all employees e.g. basic CPR.

(A) Detailed health response plan with individual actions including hygiene. Full scope of any emergency covered including evacuation of treatment areas. Regular rehearsals and update of plan. Provision for post-event psychological support and management.

(B) First aid provision significantly exceeds minimum regulatory requirements e.g. additional refresher training provided regularly as part of an ongoing training programme.

(B) Written health plan, with responsibilities by job title integrated into site plan. Liaison with outside emergency services. Detailed communication links. Plan updated as needed.

(C) Formal risk assessment of first aid requirements undertaken and updated periodically.

(C) A general written plan, covering basic activities for different functions.

(D) Basic provision of workplace first aid through first aiders trained to statutory standards.

(D) No written plan or only general concepts of activities to be undertaken.

Comments:

Comments:

**SYSTEM: Health Exposure Monitoring (Legal requirement for occupational health)**

**Exposure monitoring**

*Q10. How would you best describe your performance in the monitoring of exposure to workplace health hazards such as chemicals and noise?*

(A) Personal exposure monitoring programme fully implemented where identified by risk assessment and advised by an occupational hygienist. There is a documented monitoring strategy, quality assurance in place for sampling, analysis and record keeping. Results used to drive continuous improvement in exposure control measures.

(B) Personal exposure monitoring data available related to relevant workplace health hazards in all work processes. Documented monitoring methods, according to recognised protocols.

(C) Personal exposure monitoring conducted related to most health risk assessments where the adequacy of exposure control is assessed as uncertain. Evidence of competence of monitoring personnel.

(D) No formal plan for monitoring exposure to health hazards. Little or no data on exposure. Data largely based on static rather than personal exposure monitoring. Competence of monitoring personnel not established.

Comments:

**Health surveillance**

*Q11. What is the status of health surveillance programmes for workplace health hazards on your site such as chemicals, noise or hand-arm vibration?*

(A) In addition to (B), a formal system to review links between health and exposure monitoring data. Formal audit programme implemented to check performance of health surveillance programme.

(B) Health surveillance, if identified as a requirement, is an integrated part of comprehensive risk management systems for the control of workplace health hazards. Written and reviewed protocol for surveillance procedures. Formal reports of programme outcomes reviewed for learning and consultation with management and workforce. Sickness absence monitoring in place to detect possible work-related health effects.

(C) Health surveillance complies with specific regulatory requirements. Outputs from risk assessment are used to inform health surveillance programme.

(D) Health surveillance requirements have not been fully implemented for all relevant workplace health hazards.

Comments:

**SYSTEM: Health and Business Performance**

Wellness Support Programmes	Absence Case Management and Rehabilitation Programmes	Health Promotion and Education
<p><i>Q12. What level of wellness support programmes is offered to your employees to enhance general health and well-being and promote business performance?</i></p> <p>(A) Promoting business performance through investment in programmes to enhance the health, well-being and productivity of employees is formally part of a company health management strategy. Health and productivity business performance metrics are included in performance data reviewed by senior management.</p> <p>(B) Company policy requires assessment of wellness programme needs and provision of wellness support programmes for enhancement of both physical and mental health.</p> <p>(C) General health and well-being support is recognised as a business need and some basic wellness programmes are in place e.g. periodic health education awareness campaigns.</p> <p>(D) No wellness support programmes.</p>	<p><i>Q13. How would you best describe your absence case management and rehabilitation programmes following periods of absence due to illness or injury (occupational or non-occupational)?</i></p> <p>(A) Additional funding and provision of services to encourage earlier return to work for selected cases guided by business case e.g. physiotherapy treatment, counselling/psychotherapies, rehabilitation treatment programmes and funding of private medical investigations/treatment</p> <p>(B) Absence case management and rehabilitation process formalised in policies and procedures with co-ordinated roles and responsibilities defined for management, HR and health team. Proactive referral of cases to occupational health specialist to initiate case assessment within first few weeks of absence and co-ordinated process to follow up case through to completion of rehabilitation programme.</p> <p>(C) Absences monitored by HR/ line management and some reactive involvement of occupational health specialist e.g. return to work health assessments.</p> <p>(D) No involvement by occupational health specialist in the management of absence cases.</p>	<p><i>Q14. How would you best describe your health promotion and education programmes for general health and well-being issues?</i></p> <p>(A) Integrated part of business health and well-being strategy to enhance health, productivity and performance. Explicit senior management support for health education campaigns. Employee participation encouraged through incentive programmes. Formal auditing of health promotion campaign effectiveness.</p> <p>(B) Health promotion programme plan that includes periodic health education campaigns to address the specific wellness needs of the workforce.</p> <p>(C) Occasional provision of health promotion information e.g. newsletters, notice boards, leaflets.</p> <p>(D) No programme in place.</p>
<p>Comments:</p>	<p>Comments:</p>	<p>Comments:</p>

## ANNEX II – SUSTAINABLE HEALTH LEADING METRIC SCORECARD

Facility Name: ..... Date: .....

Mark the rating for each question with a "X"

	Question	A	B	C	D
Health leadership	Q1				
Health policies and procedures	Q2				
Records	Q3				
Health programme auditing	Q4				
Information, instruction and training	Q5				
Workplace health hazards and health risks	Q6				
Control of chemical exposure	Q7*				
First aid	Q8				
Medical emergency planning	Q9				
Exposure monitoring programme	Q10*				
Health surveillance programme	Q11*				
Wellness support programmes	Q12				
Absence case management	Q13				
Health promotion and education	Q14				

\* If there is no exposure to chemicals, question 7 does not apply and where there are no indications for exposure monitoring or health surveillance, then questions 10 and 11 do not apply either. All other questions apply to any type of facility.

### Key

- A = Advanced**
- B = Best practice**
- C = Controlling**
- D = Developing**

	Health Leadership
	Health Organisation
	Health Hazards and Exposure Control
	Health Exposure Monitoring
	Health and Business Performance

#### DISCLAIMER

The CIA takes no responsibility for the health of any company's workers. The tool is an aid to help businesses improve the health and wellbeing of their existing programmes. Its use does not guarantee there will be no occupational health events, but will help in reducing and preventing such events.







**Chemical Industries Association**

Kings Buildings, Smith Square, London, SW1P 3JJ

Telephone: 020 7834 3399

Email: [enquiries@cia.org.uk](mailto:enquiries@cia.org.uk)

[www.cia.org.uk](http://www.cia.org.uk)



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