

VISION ZERO

Proactive Leading Indicators

A guide to measure and manage safety, health and wellbeing at work



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Foreword

This ISSA Guide complements the ISSA Guide for VISION ZERO and its 7 Golden Rules. The Proactive Leading Indicators presented are not standards, but are offered by the ISSA as a free supplementary tool for every enterprise or organization committed to VISION ZERO, advanced or beginner, large or small, local or international.

By initiating this prevention project and publishing the results, the ISSA is following up on the great success of the VISION ZERO prevention strategy and its 7 Golden Rules, which were launched at the XXI World Congress on Safety and Health in Singapore, 2017. We are grateful to report a steady growth of the global VISION ZERO community over the last 3 years, leading to more than 11 000 enterprises, trainers and supporters committed to VISION ZERO from all over the world, from all industrial branches and from all company sizes.

In order to measure and evaluate the quality and success of organizational performance in relation to safety and health, we traditionally have focused on occupational accident and disease statistics - the so-called lagging indicators. However, many organizations found out that this approach is not sufficient. They are looking for indicators, which not only highlight the past, but also the current situation or even what should be done in the future. This was the reason for initiating the VISION ZERO Proactive Leading Indicators project along the well-accepted 7 Golden Rules of VISION ZERO.

The VISION ZERO Proactive Leading Indicators project is a joint project of seven ISSA Sections for Prevention, and is supported by all 14 Sections under the ISSA Special Commission on Prevention - because the suggested indicators can be applied to all industrial sectors, as can the 7 Golden Rules.

The Proactive Leading Indicators can be used for multiple purposes, internally to improve safety, health and wellbeing, as well as in external business relations such as supply chains, or for benchmarking purposes.

We are very grateful for the support and input we received from the participating sections, for the excellent work of the group of the four researchers, and for the feedback we received during the project from different enterprises, organizations and experts.

The publication of this guide and its 14 leading indicators is just a starting point - it has to be a living document. Please continue to communicate with us about your ideas and experiences of using the indicators, in order to establish a continuous improvement process.

Martina Hesse-Spötter
Chair of the ISSA Special Commission on Prevention

Helmut Ehnes
Chair of the VISION ZERO Steering Committee of the ISSA Special Commission on Prevention

Background

Why were the indicators developed?

The development of proactive leading indicators was carried out in response to requests from companies and organizations that have associated themselves with the ISSA VISION ZERO strategy. The ISSA Guide *VISION ZERO - 7 Golden Rules for zero accidents and healthy work* subsequently formed the framework for the indicators, with two indicators being developed for each Golden Rule.

How were the indicators developed?

The development process involved sourcing information and evidence from leading VISION ZERO organizations, scientific literature, publications from other reputable sources (e.g. national agencies, industry), and the expertise and experience available in the project team and steering committee. It also involved presentations and discussions at conferences such as: Working on Safety (Austria, September 2019), APA/NIOSH Work Stress and Health (USA, November 2019), VISION ZERO Summit (Finland, November 2019), and various ISSA network and steering committee meetings. A draft set of seven proactive leading indicator factsheets was developed and widely communicated, and feedback was obtained via an online survey with response from companies and organizations in more than 20 countries and 20 sectors. The indicators and fact sheets were adapted and revised, and a second draft set of 14 indicators was developed and discussed with the steering committee. The final results are the set of 14 indicator factsheets, as well as this guide.

Developers

The fact sheets and guide were developed for ISSA by Professor Gerard Zwetsloot (Netherlands), Senior Researcher Pete Kines (Denmark), and Professor Stavroula Leka (Ireland) in cooperation with Associate Professor Aditya Jain (UK) during 2019 to 2020. The team brought with them combined academic and practical experiences in occupational safety, health and wellbeing.

Scientific status

The development of the set of proactive leading indicators is described in more detail in a scientific paper, which is published in *Safety Science*. The reference is: Zwetsloot, G.I.J.M.; Leka, S.; Kines, P.; Jain, A. 2020. "Vision zero: Developing proactive leading indicators for safety, health and wellbeing at work", in *Safety Science*, Vol. 130, October, No. 104890.

The paper can be downloaded or read free via the following link:

<https://doi.org/10.1016/j.ssci.2020.104890>

Funding and Steering Committee

Seven International Sections on Prevention of the ISSA supported and financed the project:

- ISSA Section on Prevention in the Construction Industry
- ISSA Section on Education and Training for Prevention
- ISSA Section for Electricity, Gas and Water
- ISSA Section on Information for Prevention
- ISSA Section on Prevention in the Mining Industry
- ISSA Section on Prevention in Trade, Goods Logistics and Port Handling
- ISSA Section on Prevention in Transportation

The ISSA Project Steering Committee provided the project team with ideas and feedback during the project, and supported the project team in attaining inputs from companies and organizations. The committee consisted of the following representatives from the funding ISSA Sections and from the ISSA General Secretariat: Helmut Ehnes (Chair), Gisela Derrick, Christian Felten, Martina Hesse-Spötter, Petra Jackisch, Jens Jühling, Karl-Heinz Noetel, Sigrid Roth, Udo Schöpf, Alan Stevens, Sven Timm, and Bernd Treichel (ISSA General Secretariat).

VISION ZERO

VISION ZERO (at work) is based on the assumption that all accidents, harm and work-related ill-health are preventable. VISION ZERO is then the ambition and commitment to create and ensure safe and healthy work by preventing all accidents, harm and work-related diseases and continually promoting excellence in Safety, Health and Wellbeing (SHW). VISION ZERO should be understood as a journey, a process towards the ideal. It is also a value-based vision, implying that work should not negatively affect workers' SHW, and if possible, should help them maintain or improve their SHW and develop their self-confidence, competences and employability.

Organizations can commit themselves to VISION ZERO at any level of SHW performance. Genuine commitment to VISION ZERO can initiate and sustain the process and social support necessary for the VISION ZERO journey. VISION ZERO is not something you have or attain, it is something you do. VISION ZERO is not only for the very best or large organizations that have their own SHW professionals, it is also relevant for small organizations that do not have much experience in integrating SHW as a part of their business strategy.

It is important to realize that a Vision (a mind-set, a vivid mental image of what the future will be or could be like) implies a long-term ambition; it does not imply that "zero" is or should be a target, but rather an ambition based on the understanding that accidents, harm and work-related ill-health are preventable through proper and timely design, planning, procedures and practices.



Safety, Health and Wellbeing

For the purpose of the proactive leading indicators in this guide, the following working definitions of Safety, Health and Wellbeing are used:

- Safety at work is characterized by the active promotion and maintenance/sustainability of safe conditions and behaviour at work to sustain injury free workplaces, and the active prevention of sudden and unexpected adverse events such as accidents, incidents and near misses, as well as unsafe working conditions.
- Health – Physical health at work is characterized by the active promotion and maintenance/sustainability of healthy conditions and behaviour at work to sustain workers’ physical health and working capacity, and the active prevention of ill-health and poor psychosocial working conditions.
- Wellbeing – Psychological health at work is characterized by the active promotion and maintenance/sustainability of healthy psychosocial working conditions to sustain individuals’ positive mental health and ability to work productively and creatively, and the active prevention of ill health and poor psychosocial working conditions.

The three aspects - Safety, Health and Wellbeing - are closely related and interacting. This implies opportunities for synergy, which is why all the proactive leading indicators are relevant for all three aspects. It is advisable to deal with the three aspects in an integrated way, and if possible integrate them jointly into business processes. However, to guarantee that sufficient attention is paid to each of the three aspects, the proactive leading indicators in this guide propose that each aspect be evaluated separately. Many organizations nowadays have more advanced policies and systems to ensure safety - than for health and wellbeing. The implication of the interactions between SHW is that even if an organization only considers committing itself to the long-term goal of promoting safety, it is also necessary to deal adequately with health and wellbeing.



From “Safety” to “Safety, Health & Wellbeing”

When organizations say “we take care of health and safety”, this often means that safety is taken care of, and that only some of the more tangible aspects of health are covered. Many organizations realize that the wellbeing of their personnel has become increasingly important, but do not yet have systematic and proactive approaches to deal with it.

Integrated or specific attention for health and wellbeing?

Each of the proactive indicators are relevant for all three aspects: safety, health and wellbeing, and consequently the SHW abbreviation is used in this guide and the 14 fact sheets. It is recommended that the three aspects are integrated, and are also an integrated part of the business processes of the organization. To avoid SHW ending up only dealing with safety – with a very limited focus on health and wellbeing, it is recommended to use the indicators for the three aspects individually. This will help organizations to get a good picture of how systematically and proactively not only safety but also health and wellbeing are managed; it can also trigger organizations to use successful safety analogies to improve health and wellbeing. When health and wellbeing management is developed to a similar degree as safety management in an organization, then it is an excellent opportunity for further integration of the three aspects in business processes.

Opportunities for synergies

There are important opportunities and potential sources for synergy between the three SHW aspects. SHW represent similar human and social values, and each is based on valuing people. There are also common “supporting values” that are relevant for all three aspects, e.g. trust is important for wellbeing and it is important for a culture wherein people feel free to report incidents and near misses, or address health problems. Being “fit for work” physically and mentally is important for managing safety. Managing safety and wellbeing both imply reduction and control of “deviations from normal” in work processes, and in increasing the accuracy of work. Good mental health helps to prevent (unnecessary) human errors, which is also important for the prevention of incidents. There are also important complementarities between safety and wellbeing: for safety reasons there is increasing attention on the development of a good safety culture and promotion of safe behaviour, both have a strong psychological aspect. In the literature on wellbeing, there is a lot of attention given to work organization, which is also relevant for safety. For safe behaviour, focus is often on the individual, while for wellbeing it is social processes like social support, good communication and cooperation, and a certain degree of autonomy that are very important. There are therefore good reasons to state that even if the aim is solely focused on safety and a vision of “zero accidents”, it is necessary for organizations to manage wellbeing adequately in order to achieve the synergies mentioned above.

Wellbeing

Both physical and psychological health and wellbeing at work are affected by psychosocial hazards in terms of work organization (e.g. job content, high work load and work pace, regular overwork, lack of control, role ambiguity, role conflicts, inflexible work schedules) and interpersonal relationships at work (e.g. [fear of] conflicts, harassment, bullying). The physical work environment can also directly affect our health and wellbeing: nobody likes to work in noisy or dirty workplaces or working with poor equipment. Risks arising from psychosocial hazards can be systematically managed like any other type of risk. A healthy psychosocial work environment in terms of, for example appropriate social support from leaders and peers, appropriate degree of autonomy and opportunities for learning and development, can positively contribute to health and wellbeing, as well as to safety.

In many organizations, the human resource (HR) department is in charge for supporting the development of wellbeing, while engineers or dedicated occupational safety and health (OSH) professionals are mostly involved in supporting health and safety. While HR departments have much experience in dealing with people, they are usually less experienced in systematic OSH management; likewise, OSH professionals usually have less experience with addressing work organization. Breaking through the various barriers of organizational silos and creating a common SHW strategy implies opportunities for greater organizational effectiveness and synergies.



The 7 Golden Rules for VISION ZERO

The ISSA VISION ZERO strategy encompasses 7 Golden Rules:

-  1. Take leadership – demonstrate commitment
-  2. Identify hazards – control risks
-  3. Define targets – develop programmes
-  4. Ensure a safe and healthy system – be well-organized
-  5. Ensure safety and health in machines, equipment and workplaces
-  6. Improve qualifications – develop competence
-  7. Invest in people – motivate by participation

The ISSA guide for the 7 Golden Rules, which addresses employers and managers, can be downloaded from the ISSA VISION ZERO website (visionzero.global) and is available in many languages.

Proactive leading indicators – Elaborating on the 7 Golden Rules

The ISSA Guide for the 7 Golden Rules forms the basis for the development of VISION ZERO at the organizational level. This complementary guide on proactive leading indicators for VISION ZERO elaborates on the 7 Golden Rules. It is advised to first use the Guide for the 7 Golden Rules to identify the most relevant and important areas for improvement in your organization. The proactive leading indicators presented in this guide can then help to focus on key activities associated with the Golden Rules.

All the indicators in this guide are relevant for Safety, for Health and for Wellbeing, but it is best when SHW are integrated into the normal business and working processes. A first step towards that ideal is to ensure that SHW are not treated separately, but are managed and considered as interdependent, relevant for the SHW of working people. This may require effective cooperation and mutual learning of SHW staff and stakeholders from different departments, contractors, partner organizations, etc.

What are leading and lagging indicators?

Leading and lagging indicators for Safety, Health and Wellbeing (SHW) can be used in a complementary fashion – rather than be mutually exclusive. They can be compared to driving a car, where leading indicators are seen by looking through the front windshield and the direction you are headed, whereas lagging indicators involve looking back in your side and rear view mirrors.

Lagging indicators are often outcome focused, and involve an accumulation of historical data over a long period of time. Examples are reported accidents and injuries, sickness absence (e.g. disease, physical and psychological health issues); compensation claims; incidents or near misses (including those with the potential to cause injury, ill health, or loss); early retirement; and production days lost through short/long term sickness absence. Lagging indicators can be used to define improvement aims (e.g. fewer incidents or reduction of sickness absence), but usually do not provide clues as to how to achieve such aims.

Leading indicators are often process focused, and are proxies for activities that are assumed to improve SHW. Many leading indicators refer to activities that are generally regarded as good practice, such as integrating SHW in: leadership roles and responsibilities, on-boarding and training, meetings, and procurement. They serve to identify trends in strengths and weaknesses in SHW processes that require attention, and can be used for decision-making to improve specific processes.

Proactive leading indicators reflect the actionable, current and ongoing processes, activities and performances that are doing more than merely controlling existing risks and safeguarding the status quo, but focus on recognizing, creating, using and evaluating opportunities for continual improvement. In this way, they have a greater potential to generate impact. Some of their relevant characteristics involve: using innovation and influencing change for improved SHW; anticipating SHW risks at an early stage (e.g. in design and procurement); developing worker-friendly business models; applying measures higher up in the hierarchy of control measures; and promoting the development of a learning prevention culture, where social support, trust, justice and openness are important, and so on.

Why proactive leading indicators for VISION ZERO?

Small organizations can use proactive leading indicators to highlight activities that help generate good SHW (and associated good practices). Medium and large organizations can use the indicators to also measure (quantify) how well they perform with respect to key elements associated with the 7 Golden Rules. They can also use the indicators for benchmarking purposes, both within the organization (comparing sites or units), in the sector (comparing with competitors in the sector), and across sectors (comparing with frontrunners from other sectors).

A popular saying is: “What gets measured - gets done”. Though VISION ZERO implies a journey that is never fully “done”, the indicators can certainly help organizations ensure that key activities for good SHW “get done”, and are sustainable. Determining the number of cases each month in which each aspect of SHW have been an integrated part of a process, for example induction, training, procurement, pre-work briefings, planning and organization of work, and so on, helps to keep focus on continuous improvement with SHW. The indicators can be useful for “big decisions” in providing directions for the development in the year(s) to come, as well as for developing, evaluating and reviewing activities from recent months, and setting out directions for the coming months. Some of the reasons for using (proactive) leading indicators are that they help in:

- Focusing on activities that generate good SHW
- Predicting future SHW performance
- Identifying strengths and weaknesses - in key factors and processes that determine SHW performance (i.e. promoting SHW and minimizing SHW risks)
- Providing timely, proactive and relevant feedforward and feedback mechanisms to both leaders and workers
- Allowing for benchmarking within and between organizations and sectors, nationally and internationally
- Demonstrating good practices and a true prevention culture to external stakeholders like clients, business partners, investors, insurers, and authorities, and showing good performance to stakeholders like banks, insurance providers, contract partners, and even customers and to the society at large
- Requiring good practices and a true prevention culture from contractors and suppliers
- Promoting the connection between the Sustainable Development Goals of the United Nations, corporate social responsibility and SHW.

Cost-benefit analyses of using proactive leading indicators are not yet available. However, as mentioned in ISSA’s VISION ZERO materials and supported by ample, current evidence, the return on investment in Occupational Safety and Health is generally 2.2 for every monetary unit (e.g. 1 dollar, euro or peso) invested.

The criteria for selecting the proactive leading indicators for VISION ZERO

The following criteria formed the foundation for the selection and development of the set of proactive leading indicators:

- Proactivity
- Usefulness in attaining compliance and going beyond compliance
- Relevance for each of the three aspects: Safety, Health, Wellbeing
- Potential for synergies between the ISSA 7 Golden Rules for VISION ZERO and the three aspects of SHW
- Evidence of effectiveness from industrial/organizational practice
- Scientific evidence of effectiveness¹
- Suitability for qualitative use by smaller organizations
- Relative easiness to measure quantitatively (no additional tools required)
- Suitability for quantifying SHW performance (in large and medium sized organizations)
- Ability to provide sufficient “communicative power”
- Complementarity and providing a good balance to lagging indicators
- Usefulness for reviewing SHW policy as well as for regular (for example monthly) decision-making about planning and ways of working
- Comprising of a mix of both traditional and more innovative indicators
- Usefulness in improving the effectiveness of existing management systems and for the development of a prevention culture

1. The scientific evidence and evidence of effectiveness from practice is largely based on indicators for safety, as there is limited research and scientific evidence on health and wellbeing indicators.



Who are the proactive leading indicators relevant for?

The proactive leading indicators are relevant for organizations that have adopted VISION ZERO, or are considering adopting VISION ZERO. They are useful for industries as well as service sectors, not for profit and for profit organizations and for large, medium sized and small organizations. VISION ZERO is a commitment strategy; commitment can form the start of the SHW strategy at an initial level of SHW performance. It is not only for the very best performers, and in many VISION ZERO organizations safety processes are much more developed than those for health and wellbeing. Proactive leading indicators for SHW can be helpful in all these contexts.

The primary user group for the indicators are employers, leaders, top and middle managers. This is because VISION ZERO requires the commitment of the organization's leaders, and line managers who have the primary responsibility for the operation of SHW in their organizations. The secondary user groups are worker representatives. Worker representatives are crucial in ensuring that the worker voice is not lost, in reflecting on the use of the indicators in practice and in facilitating uptake of good practices in the organization in line with the indicators.

In large or medium sized organizations that want to use the indicators quantitatively, (such as for benchmarking purposes), a secondary user group are (internal) SHW experts/professionals. These professionals have a crucial role in proposing and explaining the importance of the indicators to the organization's leaders. A second important task is to collect data necessary for using the indicators, and to help present and communicate the indicators within the organization.

The tertiary user group of the indicators are SHW policy makers and authorities, social security organizations as well as sector organizations and financing and insurance partners. These organizations can use the indicators to stimulate VISION ZERO in the industries and service organizations they focus on, to measure SHW performance, and to stimulate benchmarking of their target organizations.

Finally, some organizations may also prefer to incorporate the indicators into a broader set of Key Performance Indicators (KPI), such as balanced scorecards, or in broader benchmark activities.



The set of 14 proactive leading indicators

The set of proactive leading indicators for VISION ZERO is comprised of 14 proactive leading indicators – two for each of the ISSA VISION ZERO 7 Golden Rules. The indicators may however overlap with one or more of the other six rules. The aims, key concepts, good practice, limitations and options to measure each indicator are provided in each of the 14 fact sheets (see pp. 27–41).

No.	PROACTIVE LEADING INDICATOR	AIM (Short description; see details in section Fact sheets)
1.1 	Visible leadership commitment	Through visible leadership commitment, leaders demonstrate their commitment to SHW and actively promote SHW improvement.
1.2 	Competent leadership	Committed and intrinsically motivated SHW leadership is essential to drive the development processes of VISION ZERO.
2.1 	Evaluating risk management	Evaluation of the effectiveness of SHW risk management shows leadership focus and commitment to improving SHW, and supports organizational learning and continuous development.
2.2 	Learning from unplanned events	Learning from unplanned events (incidents, events, cases) contributes to preventing similar undesirable events from (re)occurring.
3.1 	Workplace and job induction	Integrating SHW in induction processes demonstrates that SHW are an integral part of each job and each business process.
3.2 	Evaluating targeted programmes	Evaluating targeted SHW programmes (for example temporary campaigns) helps to verify that they are implemented as intended, and improvement goals are met.
4.1 	Pre-work briefings	Integrating SHW in pre-work briefings allows for the identification of context specific hazards, risks and prevention measures prior to work.
4.2 	Planning and organization of work	Planning and organization of work is essential for the success of every organization and for ensuring SHW.
5.1 	Innovation and change	Technological, organizational and personnel changes occur frequently in organizations and should be considered proactively to improve SHW from the start in the design phase.
5.2 	Procurement	Procurement can determine SHW risks for a long period. The indicator aims to trigger the systematic use of procurement for SHW improvement.
6.1 	Initial training	Initial training is key to ensuring good SHW and to qualifying leaders and workers before they start their jobs.
6.2 	Refresher training	Refresher training ensures that leaders and workers' knowledge and skills on SHW remain up to date.
7.1 	Suggestions for improvement	When suggestions for SHW improvements are welcomed and are taken seriously, it stimulates active commitment and contributes to SHW improvement.
7.2 	Recognition and reward	Recognition and reward for SHW involves showing appreciation for engaging in desired SHW behaviours.

Three options for using the VISION ZERO proactive leading indicators

There are three options for using the proactive leading indicators, which can be regarded as three steps of increasing precision and complexity.

Very small organizations may only wish to use the first option. The second option may be useful for most organizations, and small ones may prefer to use option two for a limited set of indicators. The third option allows for external benchmarking both within and across sectors, and can be used by larger organizations committed to VISION ZERO.



Option 1: The YES/NO Checklist

Option 1 is a simple “Yes” or “No” checklist approach focusing on the key activities for good SHW processes. The use of this version provides an organization with insight into whether the key activities for good SHW processes are being performed. The tool differentiates between the three aspects of safety – health – wellbeing. It is also useful for organizations that do not have their own SHW experts or professionals, as well as organizations that are already advanced in safety, but much less so for health or wellbeing.

Option 2: The Frequency Estimation

Option 2 addresses the frequency with which key activities for good SHW processes are carried out in a systematic and consistent manner. The degree of a systematic approach and its consistency is estimated using five broad semi-quantitative categories: Always or almost always - Frequently - Occasionally - Rarely - Very rarely or Never. Option 2 may also be useful for benchmarking internally between different departments or sites.

Option 3: The Quantitative Measurement

Option 3 involves quantitative measurements. It is a more advanced approach whereby the key activities are quantitatively measured with either frequencies or percentages, and the outcomes can also be used for internal and external benchmarking, both nationally and internationally. Option 3 requires more work in terms of collecting and recording the indicator data. This may be a reason for organizations not adopting all SHW indicators for option 3 at the same time, but a selection thereof (see suggestions below).

The three options can be regarded as a step-wise approach, starting with option 1, and thereafter progressing with options 2 and 3. It is, however, also possible to start directly with option 2 or 3. Each of the options is explained in more detail in the following pages.

Option 1: The YES/NO Checklist

Each of the proactive leading indicators is focused on an activity, which helps to create good SHW, such as integrating SHW in pre-work meetings, or refresher training. By using the checklist the organization asks itself: “Do we perform these activities in our organization for Safety? For Health? For Wellbeing?” The answers are: “Yes” or “No” for each of the SHW aspects.

It is advisable to involve different people (leaders, workers, SHW experts) in the use of the indicator checklist, and discuss differences in a positive, learning manner. If the answer is “No”, then it is important to focus on introducing these activities, taking into account the good practices mentioned in the respective indicator fact sheet. If the answer is “Yes”, it is important to check whether further inspiration can be gained from the good practices mentioned in the fact sheets. On the next page is an example of using option 1.



Option 1: Coding the proactive leading indicators as “Yes” or “No”

Option 1. Proactive leading indicator/key activity checklist	Safety		Health		Wellbeing		Total
	YES	NO	YES	NO	YES	NO	YES
1.1 Do leaders visibly demonstrate their commitment to SHW in their work processes and behaviour?	√			√		√	1
1.2 Are new leaders selected based on their intrinsic motivation for or proven record in SHW?	√		√			√	2
2.1 Are SHW risk reduction measures evaluated?	√			√		√	1
2.2 Are reported unplanned SHW events followed-up by leaders for investigation, SHW learning/improvement, and feedback to those directly involved?	√		√			√	2
3.1 Are SHW an integrated part of induction processes?	√		√		√		3
3.2 Are targeted programmes and their SHW improvement goals evaluated?	√			√	√		2
4.1 Are SHW an integrated part of discussions in pre-work meetings?		√		√		√	0
4.2 Is the organization systematically considering SHW when planning and organizing work?	√			√		√	1
5.1 Are technological or organizational innovations used to reduce SHW hazards and risks in the design stage?		√		√	√		1
5.2 Is the promotion of SHW included in procurement processes?	√		√			√	2
6.1. Are SHW covered in initial training?	√		√		√		3
6.2 Are SHW covered in refresher training?	√			√		√	1
7.1 Are worker suggestions for improving SHW followed-up adequately?	√		√			√	2
7.2 Are workers given recognition for excellent SHW performance?	√			√		√	1
“YES” total	12/14 (86%)		6/14 (43%)		4/14 (29%)		22/42 (52%)

Achieving	81–100%
Advancing	61–80%
Progressing	41–60%
Learning	21–40%
Starting	0–20%

If according to option 1, all key activities are known in the organization, and almost all good practices are already taken into account, it is time for option 2.

Option 2: The Frequency Estimation

This option focuses on the question, to what degree the key activities are performed sufficiently, frequently and consistently, based on a five-point rating scale ranging from “Always” to “Never”.

To what degree are the following questions met? Use the following ratings: Always or almost always = 4; Frequently = 3; Occasionally = 2; Rarely = 1; Never or very rarely = 0	Safety	Health	Wellbeing	Total
1.1 How often do leaders visibly demonstrate their commitment to integrating SHW in their work processes and behaviour?	2	3	1	6
1.2 How often are new leaders selected based on their intrinsic motivation or proven record in SHW?	3	2	2	7
2.1 How often are SHW risk reduction measures evaluated?	4	2	3	9
2.2 How often are reported unplanned SHW events followed-up by leaders for investigation, SHW learning/improvement, and feedback to those directly involved?	3	1	2	6
3.1 How often are SHW an integrated part of induction processes?	4	4	3	11
3.2 How often are targeted programmes and their SHW improvement goals evaluated?	2	2	2	6
4.1 How often are SHW an integrated part of discussion in pre-work meetings?	4	2	0	6
4.2 How often are SHW systematically considered when planning and organizing work?	3	3	4	10
5.1 How often are technological or organizational innovations used to reduce SHW hazards and risks in the design stage?	3	2	3	8
5.2 How often is the promotion of SHW included in procurement processes?	4	2	0	6
6.1. How often are SHW covered in initial training?	4	3	3	10
6.2 How often are SHW covered in refresher training?	3	3	4	10
7.1 How often are worker suggestions for improving SHW followed-up adequately?	4	1	3	8
7.2 How often are workers given recognition for excellent SHW performance?	3	2	4	9
Total	46/56 (82%)	32/56 (57%)	34/56 (61%)	112/168 (67%)

Achieving	81-100%
Advancing	61-80%
Progressing	41-60%
Learning	21-40%
Starting	0-20%

The outcomes can be rated according to the qualifying scheme above, taking into account the relevant good practices. When the outcome is “FREQUENTLY” or “ALWAYS OR ALMOST ALWAYS” consider taking the next step and using option 3. This can also be done for a selection of most relevant indicators.

Option 3: The Quantitative Measurement

In option 3, the key activities are measured quantitatively and objectively. This requires some supporting activities (data gathering and recording), which could be carried out by leaders or professionals with SHW administrative responsibilities.

In option 3, percentages or frequencies are measured, for example percentage of procurement activities wherein SHW was addressed, or the frequency of pre-work meetings where SHW are discussed.

Example of percentages (indicator 6.1): An organization had 10 leaders and 40 workers who started a new job over the last 12 months. In the initial training, safety was covered for all 10 (100%) of the new leaders, health for 8 (80%), and wellbeing for 9 (90%). Safety was covered for 38 (95%) of the new workers, health for 36 (90%), and wellbeing for 32 (80%).

Organizations are advised to collect data by involving leaders, workers (or their representatives) and SHW professionals, and in using the “scores” on the set of indicators to move the organization towards being more proactive in dealing with SHW, and help to improve the prevention culture.

Organizations can use the five outcome levels (shown below), to qualify their performance and to consider whether it is important to make an effort to achieve the next level. Alternatively, organizations can define their own qualifications and ratings in terms of percentages.

Five outcome levels of using the proactive leading indicators

Measured frequencies or percentages (the ideal/standard frequency may differ per type of industry and hazard)	Qualification
81-100%	Achieving
61-80%	Advancing
41-60%	Progressing
21-40%	Learning
0-20%	Starting

Benchmarking

The proactive leading indicators can support key decisions that are expected to determine SHW performance. The indicators can also be used for (internal and external) benchmarking.

Option 1 provides the organization with insight into the proactive activities it performs. This option will usually be used only for internal benchmarking among different departments or business units. This option is also useful for medium sized organizations, or networks of cooperating small organizations.

Option 2 provides the organization with insight into how frequently or systematically the proactive activities are performed. Like option 1, option 2 can be useful for internal benchmarking, but it can also be useful for benchmarking with similar organizations. As the measurements are based on estimated frequencies or percentages, it is best to use the five qualification levels (Achieving – Advancing – Progressing – Learning – Starting) for benchmarking purposes. This can be done for each indicator individually, or for the totality of indicators (or a selection thereof).

Option 3 is based on quantitative data and therefore many of the percentages for the respective indicators can be used for benchmarking. It is also an option to use the five qualification levels. This can be done for each indicator individually. Option 3 is most relevant for more advanced organizations who want to benchmark with other frontrunner organizations, as well as internationally.



General recommendations – Good practices

- One person in the organization (or an external expert) can be given the overall responsibility for managing the indicators, i.e. the collection of data is needed for step 3, for the organization of the assessment/measurement process and for communicating the outcomes to the responsible leaders/departments and the workers involved.
- Ensure that the relevant personnel take responsibility for the key activities addressed through the indicator, if this is not yet the case. For example make all middle managers and supervisors accountable for organizing and leading pre-work briefings (see indicator 4.1).
- Emphasize that the good practices mentioned in the fact sheets, though not directly expressed in the assessments or measurements, are very important for a meaningful indicator.
- For most of the indicators, it will be useful to measure them on a monthly basis. This helps to identify trends and developments over time. It also allows for the opportunity to timely adapt planning or implementation processes.
- Though experts in the organization can play a very useful role by taking the initiative to introduce the indicators, support the assessment processes, and communicate the outcomes, it is important that each indicator is an integrated part of the business, owned by the senior leaders of the organization.



VISION ZERO

14 Proactive Leading Indicators for Safety, Health and Wellbeing at Work

Fact sheets

Rule No. 1 	Take leadership - demonstrate commitment
Indicator No. 1.1	Visible leadership commitment
Indicator No. 1.2	Competent leadership

Rule No. 2 	Identify hazards – control risks
Indicator No. 2.1	Evaluating risk management
Indicator No. 2.2	Learning from unplanned events

Rule No. 3 	Define targets – develop programmes
Indicator No. 3.1	Workplace and job induction
Indicator No. 3.2	Evaluating targeted programmes

Rule No. 4 	Ensure a safe and healthy system – be well organized
Indicator No. 4.1	Pre-work briefings
Indicator No. 4.2	Planning and organization of work

Rule No. 5 	Ensure SHW in machines, equipment and workplaces
Indicator No. 5.1	Innovation and change
Indicator No. 5.2	Procurement

Rule No. 6 	Improve qualifications - develop competence
Indicator No. 6.1	Initial training
Indicator No. 6.2	Refresher training

Rule No. 7 	Investing in people – motivate by participation
Indicator No. 7.1	Suggestions for improvement
Indicator No. 7.2	Recognition and reward



Proactive Leading Indicator Fact Sheet

Indicator No 1.1	Visible Leadership Commitment
Rule No. 1	Take leadership - demonstrate commitment

Aims

Through visible leadership commitment and being exemplary role models, leaders demonstrate their commitment to SHW, and actively promote and support SHW improvement processes and the development of a prevention culture.

Key concepts

Visible leadership commitment implies that leaders actively and consistently demonstrate that SHW are core values of the organization, which should never be compromised. SHW is regarded an essential part of good business. By being good role models, leaders stimulate workers to actively contribute to SHW improvements, both in their actions and behaviour. When work or production pressures increase, committed leaders still ensure a high level of SHW. Committed leaders are aware that people are the organization's greatest asset. They build trust and engagement with workers by open communication to report hazards and improve SHW as an integrated part of their profession and the business.

Good practice

1. As role models, leaders set the standards for SHW, and promote them through their behaviour, verbal and non-verbal communication.
2. Carry out regular "walkthroughs" of the workplace and engage in dialogue with workers to understand SHW risks at the operational level and promote SHW behaviour.
3. Ensure that SHW are an integrated part of formal and informal meetings, and be eager to identify opportunities for improvement.
4. Ensure that SHW are an integrated part of all business activities, including procurement, planning, human resource management, performance evaluation, incident investigations, ensuring remedial action, follow-up and learning.
5. Share SHW as core values with business partners, and ensure that contractors and suppliers also adhere to the organization's commitments to SHW.

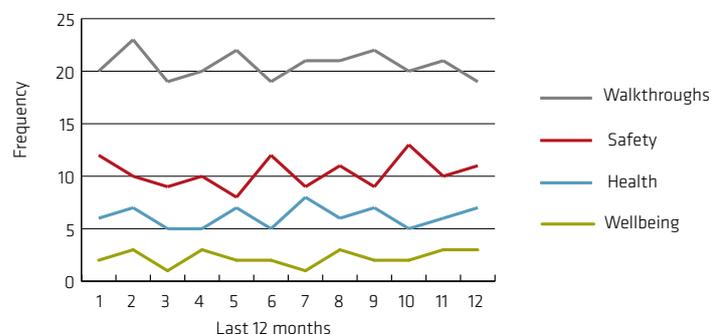
Limitations

Leaders cannot always be "physically visible" in all workplaces and to all workers (such as lone workers, e.g. truck drivers), but should ensure that everybody is aware of their commitment to SHW.

How to measure (See more details in the ISSA guide to proactive leading indicators)

- Option 1:** Do leaders visibly demonstrate their commitment to SHW in their work processes and behaviour? (Yes/No)
- Option 2:** How often do leaders visibly demonstrate their commitment to integrating SHW in their work processes and behaviour?
(Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)
- Option 3:** Determine the frequency (daily, weekly) with which leaders visibly demonstrate their commitment to integrating SHW in their work processes and behaviour.

Example option 3: A leader carries out daily walkthroughs in a department during working hours. With 20 walkthroughs held in the first month, safety issues were addressed in 12 of the walkthroughs, health in 6 and wellbeing in 2.





Proactive Leading Indicator Fact Sheet

Indicator No. 1.2	Competent leadership
Rule No. 1	Take leadership - demonstrate commitment

Aims

Committed and competent SHW leadership is essential to drive the development processes of VISION ZERO. Such leaders are intrinsically motivated to improve SHW and promote SHW as personal and organizational core values. Leaders then regard SHW as integrated parts of business processes, and support processes of continual improvement of SHW, while creating a strong prevention culture.

Key concepts

Intrinsic motivation for SHW implies that the motivation is internal, and not depending on external incentives; it is long-lasting, self-sustaining, and satisfying, and drives processes of learning and increasing competence. Competent SHW leadership comprises attitudes, skills, and knowledge including the VISION ZERO strategy, leadership skills, and experience with preventing SHW hazards and risks.

Good practice

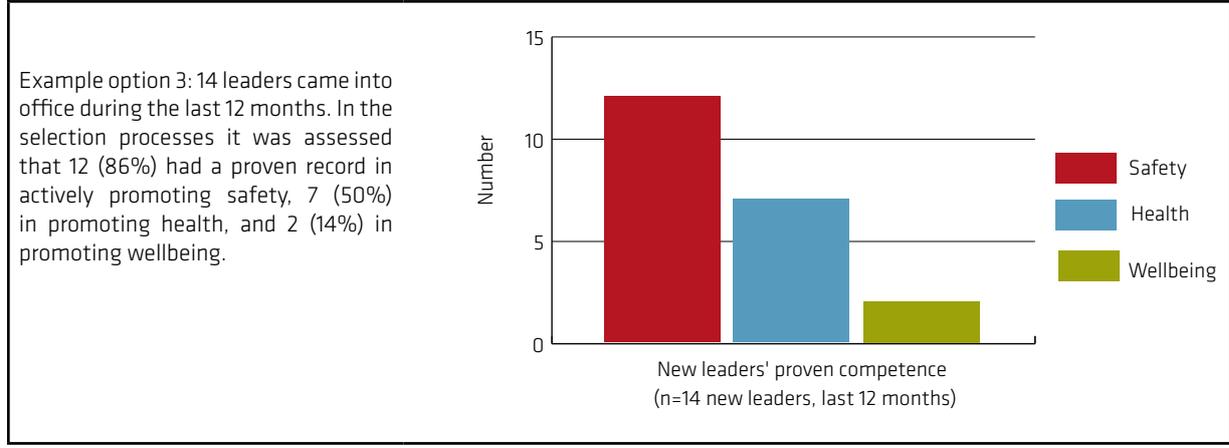
1. Selection criteria for (new) leaders should include a proven record in actively and effectively promoting SHW and good emotional intelligence.
2. Good SHW leaders often have personally contributed to preventing (serious) accidents or work-related ill health; they reflect on SHW, and adopt SHW as key personal values.
3. As SHW values are more difficult to change than skills and knowledge, their values are most important in the selection of good leaders.
4. Ensure that SHW leadership is an essential part of any leadership development or training programme.
5. Committed and competent leaders recognize that information on critical processes and undesirable events is crucial for the development of their SHW competences and performance.

Limitations

Even SHW competent leaders may be confronted with ethical and practical dilemmas and unexpected and undesired consequences of well-intended actions. These are treated as opportunities for learning and continuous development.

How to measure (See more details in the ISSA guide to proactive leading indicators)

- Option 1:** Are new leaders selected based on their intrinsic motivation for or proven record in SHW? (Yes/No)
- Option 2:** How often are new leaders selected based on their intrinsic motivation or proven record in SHW? (Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)
- Option 3:** Determine the number of new leaders that came into office during the last 12 months. During the assessments in the selection process, what percentage showed a proven record in actively promoting SHW?





Proactive Leading Indicator Fact Sheet

Indicator No. 2.1	Evaluating risk management
Rule No. 2	Identify hazards – control risks

Aims

Evaluation of the effectiveness of SHW risk management shows leadership focus and commitment to improving SHW, and stimulates active participation and influence of workers. It allows leaders and workers to improve the effectiveness and sustainability of SHW promotion measures as an integrated part of business. In addition, it allows for organizational learning and continuous development.

Key concepts

SHW risk management involves the timely and systematic identification of hazards and risks, the design of action plans, and the implementation of relevant measures to promote SHW and their evaluation.

Good practices

1. Ensure that SHW risk assessments and the evaluation of their effectiveness are a normal part of leaders' job description, and make them accountable for it.
2. Involve leaders, SHW professionals and workers in the risk management evaluation processes.
3. Apply the principles of the hierarchy of risk control (in prioritized order: elimination, substitution, isolation, engineering controls, administrative controls, person protective equipment, instruction) in the evaluation.
4. Use the evaluations to reinforce, adapt or alter the measures taken to be even more effective.
5. Include evaluation of risk assessments and action plans relevant for contractors.

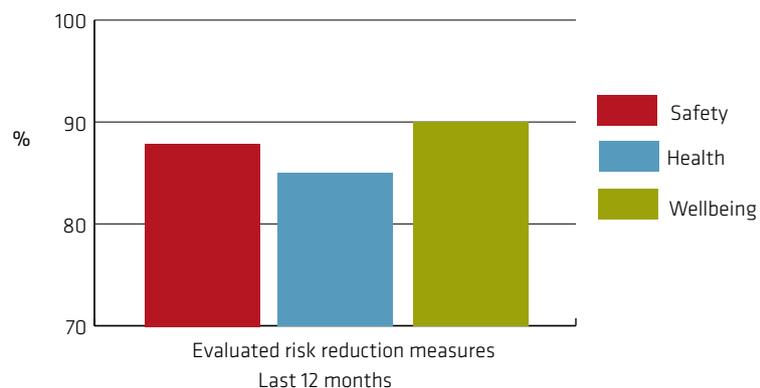
Limitations

Formal evaluations of SHW risk management should not replace daily, informal checks on risk control measures that arise through discussions between leaders and workers about their current work.

How to measure (See more details in the ISSA guide to proactive leading indicators)

- Option 1:** Are SHW risk reduction measures evaluated? (Yes/No)
- Option 2:** How often are SHW risk reduction measures evaluated?
(Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)
- Option 3:** Determine the number of SHW risk reduction measures that were planned to be implemented as a result of SHW risk management over the last 12 months. Determine the percentage of measures that were evaluated concerning their effectiveness and relevance for each aspect of SHW. For example., evaluate a case in which the effects of noise reduction measures (for health and wellbeing purposes) were implemented through technological innovation or organizational and behavioural measures.

Example option 3: During the last 12 months, 55 risk reduction measures were planned to be implemented. 22 of the 25 (88%) related to safety were evaluated, 17 of the 20 (85%) related to health were evaluated, and 9 of the 10 (90%) on wellbeing were evaluated.





Proactive Leading Indicator Fact Sheet

Indicator No. 2.2	Learning from unplanned events
Rule No. 2	Identify hazards – control risks

Aims

Learning from unplanned events (incidents, events, cases) is necessary to prevent similar undesirable events from reoccurring, and to create a culture of SHW prevention and learning. Adequate follow-up of reported unplanned events will increase reporting and learning.

Key concepts

Unplanned events can be incidents, accidents, injuries, near-misses, peak exposures, cases of work-related ill health, conflicts in the workplace, human errors, unexpected side effects, and so on. When unplanned events are reported, they should be followed-up with investigation, defining lessons learnt and using these for preventing similar reoccurrences.

Good practices

1. Encourage reporting of unplanned events by providing positive feedback to those who report them, even when they are communicated as complaints.
2. Unplanned events should be regarded as an opportunity to learn and improve, not as a failure, and are also opportunities to show commitment to SHW.
3. If similar events have been analysed previously, then focus on the contributing causes of their reoccurrence.
4. Learning from incidents and near-misses to improve safety is accepted as a good practice in many organizations. Ensure also to learn from unplanned events relevant for improving health and wellbeing.
5. Involve leaders and workers in the investigations and definitions of lessons learned.

Limitations

Learning from unplanned events is complementary to the risk assessment process, but is not a substitute for an adequate SHW risk assessment process (including implementation and evaluation of preventive measures). Learning from unplanned events is very much depending on social processes and trust.

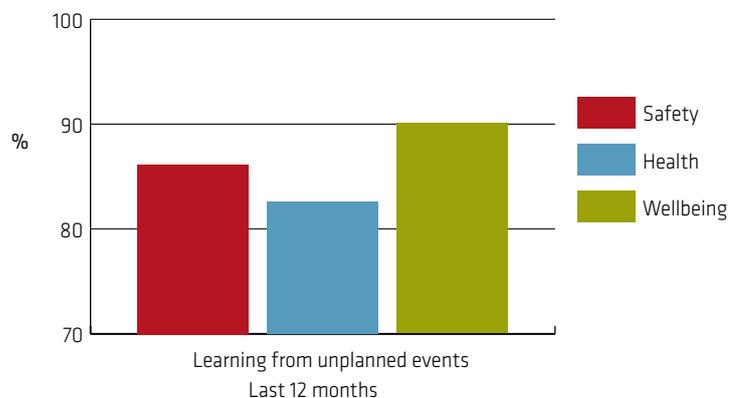
How to measure (See more details in the ISSA guide to proactive leading indicators)

Option 1: Are reported unplanned SHW events followed-up by leaders for investigation, SHW learning/improvement, and feedback to those directly involved? (Yes/No)

Option 2: How often are reported unplanned SHW events followed-up by leaders for investigation, SHW learning/improvement, and feedback to those directly involved?
(Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)

Option 3: Determine the number of reported unplanned events of the second to last month. Determine the percentage of those which were followed-up within a month with some investigation and (if relevant) lessons learnt, and feedback to the person who reported the event.

Example option 3: During the last 12 months, 55 unplanned events were reported, seven of which were relevant for more than one SHW aspect. Investigations, follow-up and learning occurred for 25 of the 29 (86%) events related to safety, 19 of the 23 (83%) events dealing with health, and 9 of the 10 (90%) events associated with wellbeing.





Proactive Leading Indicator Fact Sheet

Indicator No. 3.1	Workplace and job induction
Rule No. 3	Define targets – develop programmes

Aims

Integrating SHW in induction (on-boarding) processes demonstrates that SHW is an integrated part of each job and each business process. SHW are an essential part of leaders' and workers' new job in a workplace. It can be both a formal and informal way of welcoming new personnel to an organization, group and/or job function, and highlights SHW purpose, values and goals.

Key concepts

Integrating SHW in induction processes means including SHW in workplace introductions, job instructions and follow-up (for training see fact sheet 6.1 & 6.2). The induction process continues over a period of time, for example three months, whereby leaders and workers take on their new job in a workplace.

Good practices

1. Ensure relevant, qualified and structured induction, and do not solely rely on a “buddy system”.
2. The induction process demonstrates that active involvement in SHW is the norm for everyone in the organization.
3. Discuss the SHW aspects of the work and clarify the practicalities of SHW, so that people can apply it as an integrated part of their work.
4. Ensure each inducted worker receives an active SHW coach or mentor.
5. Ensure that newly inducted personnel are aware that they should not always follow traditional habits in the organization. Ensure that newly inducted personnel are aware of how to contribute proactively to building a prevention culture.

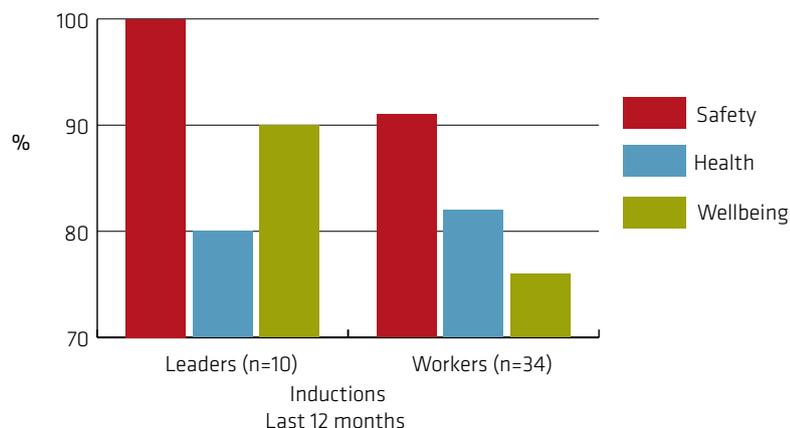
Limitations

Integrating SHW in induction processes will only have a positive effect if the business and work culture in the organization reflects integrating SHW as part of everyone's profession.

How to measure (See more details in the ISSA guide to proactive leading indicators)

- Option 1:** Are SHW an integrated part of induction processes? (Yes/No)
- Option 2:** How often are SHW an integrated part of induction processes?
(Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)
- Option 3:** Determine the percentage of newly inducted leaders and workers, for whom each aspect of SHW is an integrated part of their induction process (over the past 12 months).

Example option 3: For 10 newly inducted leaders over the last 12 months, safety was an integrated part of the induction process for all 10 (100%) of the leaders, health for 8 (80%) and wellbeing for 9 (90%). For 34 newly inducted workers safety was an integrated part of the induction process for 31 (91%) of the workers, health for 28 (82%), and wellbeing for 26 (76%).

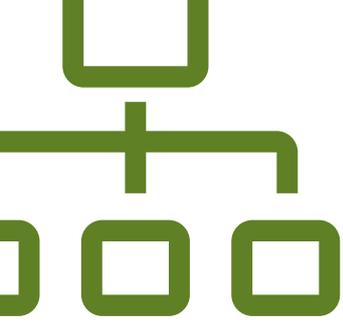




Proactive Leading Indicator Fact Sheet

Indicator No. 3.2	Evaluating targeted programmes
Rule No. 3	Define targets – develop programmes

Aims													
Evaluating targeted programmes (such as temporary campaigns) that integrate SHW in work processes helps to verify that they are implemented as intended, and that the improvement goals for SHW are met.													
Key concepts													
Targeted programmes can involve campaigns, audits, work processes, machinery, tools and behaviour. The programmes can focus on specific themes with regard to the workplace and work processes, such as the safe and healthy operation of machines and tools, use of personal protective equipment and technical aids, reduction of exposure to chemical substances or noise, or the prevention of violence, bullying and harassment. The improvement goals should be concrete and measurable within a certain timeframe. Evaluating the effects of targeted programmes involves periodically (such as monthly or yearly) checking to see if the programmes are still being implemented and followed, whether they are having their intended effect, and whether they are still relevant and sustainable. This can be done through both formal and informal approaches such as discussions with relevant leaders and workers, and by carrying out audits, assessments and surveys.													
Good practices													
<ol style="list-style-type: none"> 1. Ensure commitment to the targeted programmes from all relevant leaders and workers in the organization, and include contractors, partner organizations and other stakeholders. 2. Ensure specific SHW improvement goals have been established for both leaders and workers, following consultation based on strategic goals, evidence and legal requirements, and linked to accountability. 3. Ensure that the targeted programmes use a variety of approaches, are adapted and targeted to the various organizational levels, and involve leaders, workers and SHW professionals in the evaluation. 4. Emphasize the value that targeted programmes have for the organization's business and ethics. 5. Promote the synergy of targeted programmes with other business programmes such as reducing defects and errors, production loss, downtime, or becoming an employer of choice. 													
Limitations													
The conditions that allow for targeted programmes may also restrict focus on other relevant areas for promoting SHW. The programmes need to be periodically revised and adapted to ensure their relevance, for example due to seasonal and production changes.													
How to measure (See more details in the ISSA guide to proactive leading indicators)													
<p>Option 1: Are targeted programmes and their SHW improvement goals evaluated? (Yes/No)</p> <p>Option 2: How often are targeted programmes and their SHW improvement goals evaluated? (Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)</p> <p>Option 3: Determine the percentage of targeted programmes and their SHW improvement goals that were evaluated over the past 12 months.</p>													
<p>Example option 3: An organization had nine targeted programmes in the last 12 months. Three of the four (75%) focusing on safety were evaluated, two of the three (66%) health programmes were evaluated, and one of the two wellbeing programmes was evaluated.</p>	<table border="1"> <caption>Evaluated targeted programmes Last 12 months</caption> <thead> <tr> <th>Programme Type</th> <th>Number of Programmes</th> <th>Percentage Evaluated</th> </tr> </thead> <tbody> <tr> <td>Safety programmes</td> <td>4</td> <td>75%</td> </tr> <tr> <td>Health programmes</td> <td>3</td> <td>66%</td> </tr> <tr> <td>Wellbeing programmes</td> <td>2</td> <td>50%</td> </tr> </tbody> </table>	Programme Type	Number of Programmes	Percentage Evaluated	Safety programmes	4	75%	Health programmes	3	66%	Wellbeing programmes	2	50%
Programme Type	Number of Programmes	Percentage Evaluated											
Safety programmes	4	75%											
Health programmes	3	66%											
Wellbeing programmes	2	50%											



Proactive Leading Indicator Fact Sheet

Indicator No. 4.1	Pre-work briefings
Rule No. 4	Ensure a safe and healthy system – be well-organized

Aims

Integrating SHW in pre-work briefings allows leaders and workers to identify context specific hazards, risks and prevention measures. This shows leadership focus and commitment to SHW, and a commitment to stimulating the active participation and influence of workers.

Key concepts

Pre-work briefings are short, regular meetings between leaders and workers held directly before work tasks begin. The briefings may be planned or spontaneous/ad-hoc. The discussions deal with previous, current and upcoming work, including dialogue on ensuring SHW. Attention is paid to mutual identification and control of hazards and risks and other issues that deserve special attention as an integrated part of work and business.

Good practices

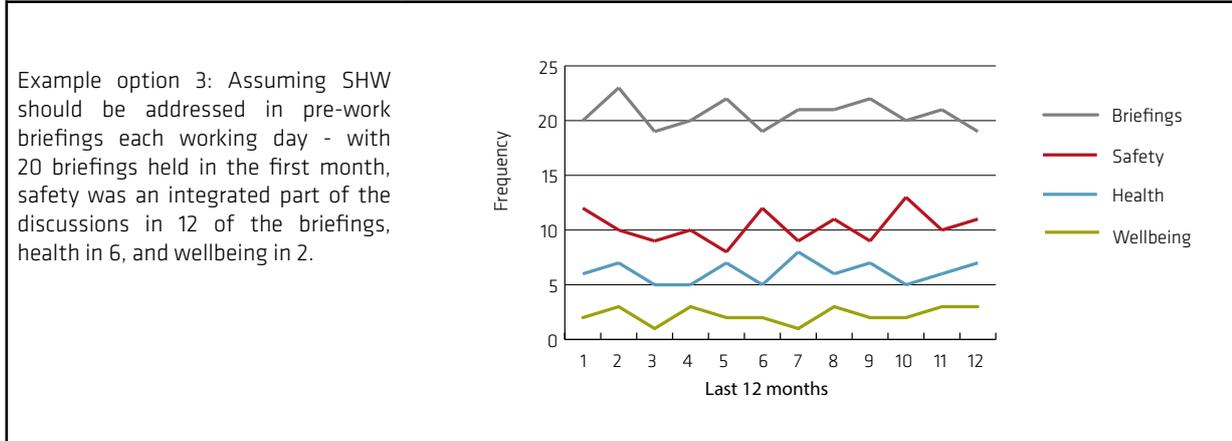
1. Ensure that pre-work briefings are a normal part of leaders' job description, and make them accountable for it.
2. Provide an open atmosphere, wherein two-way communication is central. Ask questions to trigger workers to think for themselves, and employ active listening skills. Be aware of positive and negative body language, and be culturally and linguistically sensitive.
3. Use the briefings to confirm or update the job SHW risk analysis.
4. Ensure to focus on safety issues, health (such as exposure to noise, chemical substances, heavy lifting) and wellbeing (for example mutual support and teamwork, time pressure and work load).
5. Pay attention to challenges that may arise during the work and those known from previous experiences: including unexpected deviations from the norm, dangerous situations, near misses, exposure to hazardous chemical, physical or biological factors, and cases of discrimination or bullying.

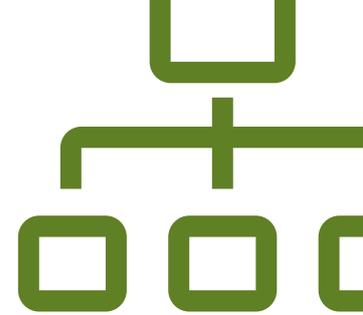
Limitations

Pre-work briefings should not replace periodic SHW training.

How to measure (See more details in the ISSA guide to proactive leading indicators)

- Option 1:** Are SHW an integrated part of discussions in pre-work meetings? (Yes/No)
- Option 2:** How often are SHW an integrated part of discussions in pre-work meetings? (Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)
- Option 3:** Determine the number of pre-work meetings held (per group/ leader) per month over the last 12 months in which each aspect of SHW was an integrated part of the discussions. Some meetings may have included all three topics, whereas others may have focused on only one or two of them. The frequency of the briefings will depend on the hazards and variations in tasks and the workplace.





Proactive Leading Indicator Fact Sheet

Indicator No. 4.2	Planning and organization of work
Rule No. 4	Ensure a safe and healthy system – be well-organized

Aims

Planning and organization of work are essential for the success of every organization and for ensuring SHW. This is because planning can make an organization competitive and efficient. Several issues need to be considered in effective planning and work organization in order to promote SHW. Good planning and work organization promote good morale and a healthy organizational culture.

Key concepts

Planning and organization of work are about the division of work tasks, cooperation and communication, appropriate time schedules and deadlines, and ensuring workers have an appropriate level of autonomy to carry out their work. SHW critical tasks should be recognized in the planning stage. All these aspects are important in ensuring a safe and healthy system and promoting SHW. They should be considered both in the design stage and in everyday practice.

Good practices

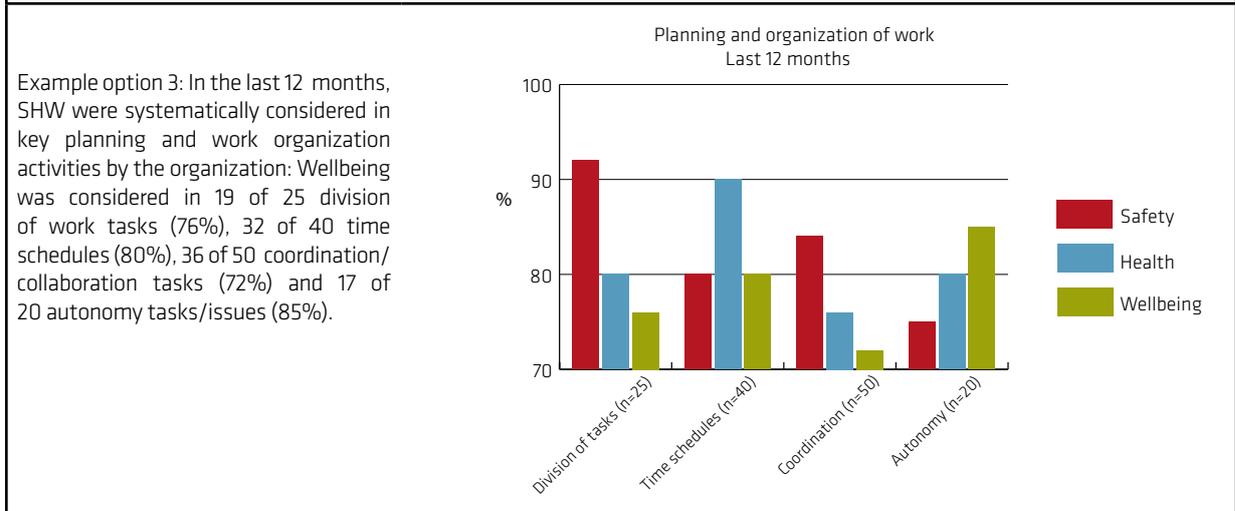
1. Planning and work organization create clear job roles and expectations that align with the organization’s overall goals.
2. Planning and work organization should consider possible impacts on SHW. Use SHW job analyses to identify SHW critical tasks.
3. Good planning and work organization should not only mitigate negative impacts but also create conditions at work that promote positive SHW.
4. Employees at all levels should know what the vision of the company is, and how their work is contributing to the short-term and long-term goals of the organization.
5. Workers should be consulted and participate in planning and organization of their work. They are the experts in their work.

Limitations

Organizations may neglect planning and work organization under challenging conditions (such as financial constraints, time pressure). It is even more important that they plan and organize work well when under these conditions.

How to measure (See more details in the ISSA guide to proactive leading indicators)

- Option 1:** Is the organization systematically considering SHW when planning and organizing work? (Yes/No)
Option 2: How often are SHW systematically considered when planning and organizing work?
 (Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)
Option 3: Determine the percentage of times that SHW were systematically considered when planning and organizing work.





Proactive Leading Indicator Fact Sheet

Indicator No. 5.1	Innovation and change
Rule No. 5	Ensure SHW in machines, equipment and workplaces

Aims

Technological, organizational and personnel changes occur frequently in organizations. Instead of assessing SHW risk after the changes, these changes should be considered proactively, and innovations should be utilized to improve SHW right from the start in the design phase.

Key concepts

Innovation and change refer to technological and organizational changes, such as new hardware or software, technological changes in production processes and workplaces, and changes in work organization and in personnel with key knowledge and experience. The design stage refers to processes for the generation of a plan or specification for an object, system or work process for creating functional products and processes prior to their implementation. It implies involving the users in the design review, which includes SHW requirements for the life cycle of the change.

Good practices

1. An explicit written commitment of senior management to use technological and organizational innovation and change as opportunities to proactively improve SHW.
2. Identify alternative technological and organizational options, assess the associated SHW risks, and identify the preferred options with minimum SHW hazards and risks.
3. SHW benefits can be obtained at low cost by integrating SHW in the early stages of innovation and change.
4. Involve SHW professionals as well as workers or end users.
5. Apply the principle of technology supporting the people, not the other way around.

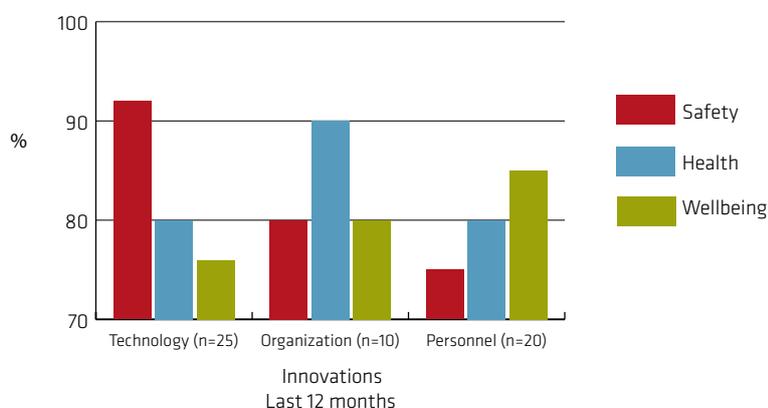
Limitations

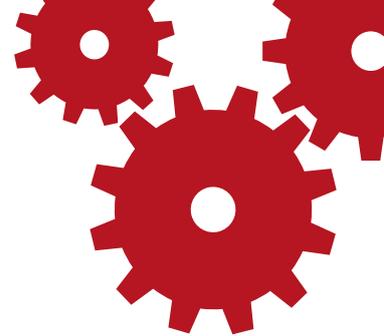
Innovations and changes used to reduce SHW hazards and risks in the design stage are no guarantee that SHW problems will not occur in later stages (for example during planning, production or maintenance).

How to measure (See more details in the ISSA guide to proactive leading indicators)

- Option 1:** Are technological or organizational innovation used to reduce SHW hazards and risks in the design stage? (Yes/No)
- Option 2:** How often are technological or organizational innovation used to reduce SHW hazards and risks in the design stage? (Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)
- Option 3:** Determine the number of technological or organizational innovations implemented during the last 12 months. For each case assess whether SHW were addressed systematically at an early stage (proactively), when alternative choices were still possible. Calculate the percentage of innovations and changes used to reduce SHW hazards and risks over the last 12 months.

Example option 3: A total of 55 technological and organizational innovations were implemented during the past 12 months: 25 technological, 10 organizational, and 20 involving key personnel. Technological innovations were to a greater degree reviewed in the design stage for safety issues (23/25=92%) than for health (20/25=80%) and wellbeing (19/25=76%), whereas organizational innovations were more often reviewed for health issues (9/10=90%), than safety or wellbeing (8/10=80%).





Proactive Leading Indicator Fact Sheet

Indicator No. 5.2	Procurement
Rule No. 5	Ensure SHW in machines, equipment and workplaces

Aims

The indicator aims to trigger the systematic use of procurement for SHW improvement. Procurement, particularly of hardware, can determine SHW risks for a long period of time, while procurement of services such as maintenance, is often associated with increased SHW risks.

Key concepts

Procurement is the process of specifying (SHW) demands in, for example obtaining goods and services, selection of suppliers, contracting and controlling delivery, installation and maintenance.

Good practices

1. Ensure that those managing the procurement process are held accountable for the systematic use of procurement for SHW improvement.
2. Ensure that SHW improvements are treated as an investment rather than a cost.
3. Involve workers and SHW experts in specifying SHW needs at an early stage of the procurement process (use their experience and expert knowledge).
4. Focus on identifying options to eliminate or substitute major SHW risks (such as carcinogenic substances, heavy lifting, noise) in defining demands and selection of suppliers.
5. Select suppliers or contractors that take care of the SHW of their personnel and personnel further down the supply chain (for instance by evaluating the SHW indicators they use).

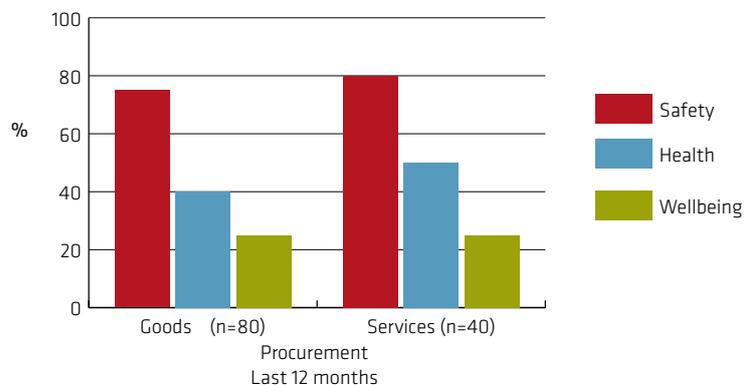
Limitations

Good SHW in procurement is no guarantee that SHW problems will not occur during the lifetime of the goods or in the service processes. Innovative SHW requirements can be a challenge for (regular) suppliers. Be aware that management of change procedures are often focused only on maintaining, and not improving SHW through procurement.

How to measure (See more details in the ISSA guide to proactive leading indicators)

- Option 1:** Is the promotion of SHW included in procurement processes? (Yes/No)
Option 2: How often is the promotion of SHW included in procurement processes?
 (Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)
Option 3: Determine the number of procurement processes in the last 12 months. Calculate the percentage of cases where SHW were included in the procurement processes.

Example option 3: In the last 12 months, there were 120 procurement activities, 80 regarding goods and 40 for services.
 Goods: Procurement requirements for safety were considered 60 times (75%), for health 32 times (40%), and for wellbeing 20 times (25%).
 Services: Procurement requirements for safety were considered 32 times (80%), for health 20 times (50%), and for wellbeing 10 times (25%).





Proactive Leading Indicator Fact Sheet

Indicator No. 6.1	Initial training
Rule No. 6	Improve qualifications - develop competence

Aims

Competence is key to ensuring good SHW. Being proactive requires training/qualifying leaders and workers before they start their job. It also shows that no job or task should be carried out without the relevant SHW competences, and that SHW are an integrated part of any job or profession.

Key concepts

SHW initial training aims to raise awareness and ensure SHW competencies. This could include an understanding of: SHW risks associated with work, principles of risk control (in prioritized order: elimination, substitution, isolation, engineering controls, administrative controls, person protective equipment, instruction), how to contribute to a prevention culture based on SHW values, and how to contribute to the achievement of the strategic SHW goals of the organization.

Good practices

1. Ensure that initial training is developed based on SHW values, good practices, risk control principles, and legal requirements.
2. Initial training demonstrates that active involvement in SHW is the norm for everyone.
3. Initial training is provided to leaders and workers as an integrated part of their professional development, and should be tailored and applicable to their job.
4. Initial training includes practical skill development, relevant to leaders' and workers' jobs. This may also include social skills.
5. Initial training is evaluated and updated on a yearly basis.

Limitations

Initial training does not make regular refreshment courses superfluous. Practical aspects of SHW prevention and promotion will come to the fore only after one's job starts.

How to measure (See more details in the ISSA guide to proactive leading indicators)

Option 1: Are SHW covered in initial training? Yes/No

Option 2: How often are SHW covered in initial training?

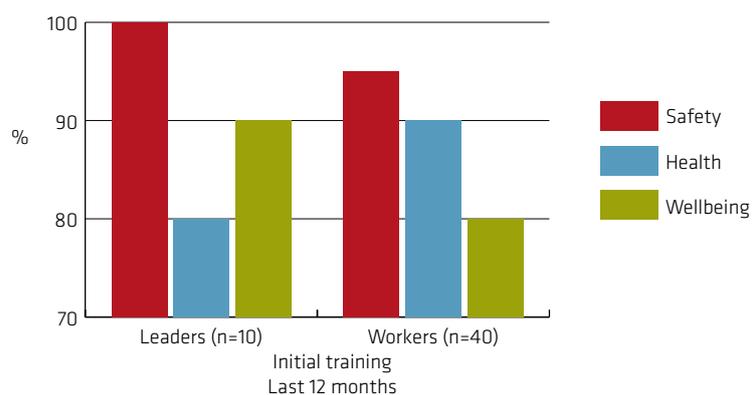
(Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)

Option 3: Determine the number of new leaders and workers (including leaders and workers who changed internally to a new job and temporary personnel) who started a new job in the last 12 months. Determine the percentage of leaders and workers for whom SHW were covered in their initial training.

Example option 3: An organization had 10 leaders and 40 workers start a new job over the last 12 months.

In the initial training, safety was covered for all 10 (100%) of the new leaders, health for 8 (80%), and wellbeing for 9 (90%).

Safety was covered for 38 (95%) of the new workers, health for 36 (90%), and wellbeing for 32 (80%).





Proactive Leading Indicator Fact Sheet

Indicator No. 6.2	Refresher training
Rule No. 6	Improve qualifications - develop competence

Aims

Developing SHW competence should be an aspect of continuous professional development. Refresher training ensures that leaders' and workers' knowledge and skills on SHW remain up to date and include new SHW insights.

Key concepts

SHW refresher training should be provided to leaders and workers on a periodic basis. The frequency of refresher training will depend on the nature of their work and emerging risks and needs. However, it is good practice that refresher training is provided at least every 2 years to ensure that leaders' and workers' knowledge and skills remain up to date.

Good practices

1. Ensure that refresher training is periodically updated in all three topics (SHW) and is available to everyone (leaders and workers) in the organization.
2. Refresher (SHW) training should reflect practical situations, and deliver solutions that are easily applicable in the job.
3. Refresher training should facilitate SHW learning on the job.
4. Refresher training should be interactive and stimulate reflection and dialogue on SHW issues.
5. Refresher training should include practical skill development and internalization of SHW values, relevant to the trainees' jobs.

Limitations

Refresher training is not sufficient to guarantee that SHW good practices are translated into everyday work.

How to measure (See more details in the ISSA guide to proactive leading indicators)

Option 1: Are SHW covered in refresher training? Yes/No

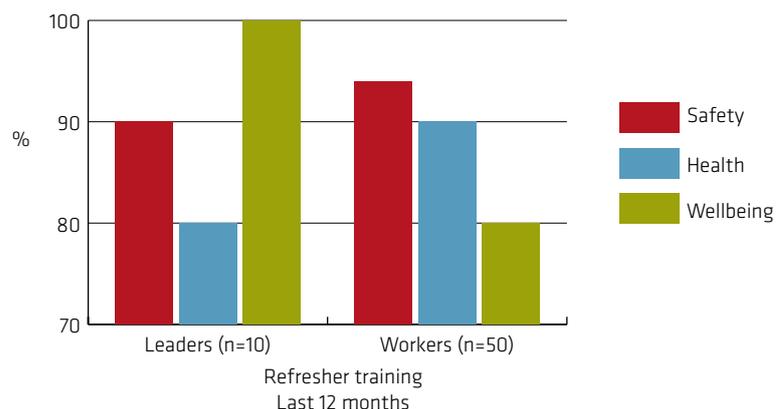
Option 2: How often are SHW covered in refresher training?

(Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)

Option 3: Determine the percentage of leaders and workers for whom SHW were covered in their refresher training over the last 12 months.

Example option 3: An organization consists of 20 leaders and 100 workers. 10 of the leaders received refresher training over the last 12 months, in which safety was covered in the training for 9 (90%) of the leaders, health for 8 (80%), and wellbeing for all 10 (100%) leaders.

50 of the workers received refresher training in which safety was covered in the training for 47 (94%) of the workers, health for 45 (90%), and wellbeing for 40 (80%).





Proactive Leading Indicator Fact Sheet

Indicator No. 7.1	Suggestions for improvement
Rule No. 7	Investing in people – motivate by participation

Aims												
In the development of a prevention culture and the active involvement of workers, it is important that suggestions of workers for SHW improvements are welcomed and are taken seriously. This will stimulate workers' active commitment to SHW and demonstrate their leaders' commitment to improving SHW.												
Key concepts												
Suggestions are proposals for SHW improvement that are submitted by workers either in writing or verbally, such as at work meetings. Reported situations that could be improved (for example reported near misses or problems in the organization of work) are also counted as suggestions for improvement. Adequate follow-ups require: (1) involvement of the responsible leader, (2) evaluation of the suggestion – which may require an investigation, (3) timely feedback to the person who made the suggestion, and (4) when relevant, that SHW initiatives are taken, evaluated and shared in the organization.												
Good practices												
<ol style="list-style-type: none"> Any suggestion for SHW improvement is welcomed as an opportunity for learning and improvement (and not as “yet another problem to solve”). A suggestion that – after evaluating it – turns out not to be useful, is also appreciated and deserves positive feedback. If a SHW improvement takes considerable time – keep the person(s) who suggested it informed of its progress. Communicate broadly in the organization about the suggestions used, the implemented measures and the positive effects they have had on SHW. Check whether the suggestions are also useful in other departments or units of the organization. 												
Limitations												
SHW suggestions from workers and completed follow-ups on suggestions cannot replace systematic SHW risk assessments and their follow-up.												
How to measure (See more details in the ISSA guide to proactive leading indicators)												
<p>Option 1: Are worker suggestions for improving SHW followed-up adequately? (Yes/No)</p> <p>Option 2: How often are worker suggestions for improving SHW followed-up adequately? (Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)</p> <p>Option 3: Determine the number of received suggestions for improvement SHW and the extent to which they have been adequately followed-up. The outcome is both the number of suggestions received and the percentage of suggestions followed-up on in the past 12 months.</p>												
<p>Example option 3: The organization received 50 suggestions for improving safety and followed-up on 44 of the suggestions (88%); received 25 suggestions for improving health and followed-up on 20 (80%) of them; and received 10 suggestions for improving wellbeing, of which they followed up on 9 of the suggestions (90%).</p>												
<table border="1"> <caption>Follow-up on SHW suggestions Last 12 months</caption> <thead> <tr> <th>Category</th> <th>Number of Suggestions</th> <th>Follow-up Percentage</th> </tr> </thead> <tbody> <tr> <td>Safety</td> <td>50</td> <td>88%</td> </tr> <tr> <td>Health</td> <td>25</td> <td>80%</td> </tr> <tr> <td>Wellbeing</td> <td>10</td> <td>90%</td> </tr> </tbody> </table>	Category	Number of Suggestions	Follow-up Percentage	Safety	50	88%	Health	25	80%	Wellbeing	10	90%
Category	Number of Suggestions	Follow-up Percentage										
Safety	50	88%										
Health	25	80%										
Wellbeing	10	90%										



Proactive Leading Indicator Fact Sheet

Indicator No. 7.2	Recognition and reward
Rule No. 7	Investing in people – motivate by participation

Aims												
Providing timely, proactive and relevant recognition and reward for excellent SHW performance to both leaders and workers is essential for fostering a SHW culture that is based on trust, respect, participation and cooperation.												
Key concepts												
Recognition and reward for SHW involves showing appreciation and rewarding leaders and workers for engaging in desired SHW behaviours. Recognition may include opportunities for personal development and career progression, and involving workers in decision making on all SHW matters. Timely provision of positive feedback to leaders and workers on SHW is also a form of recognition.												
Good practices												
<ol style="list-style-type: none"> 1. Organizations show appreciation for their workers by actively involving them in SHW decision making within the enterprise, and giving them a certain degree of autonomy. 2. Participation in decision-making helps to improve motivation and positive SHW behaviours, and leads to significant return on investment. 3. Learning from errors should be encouraged. Those who actively contribute to dissemination of lessons learnt from errors/ incidents/problems should be praised (instead of criticized for their errors; human errors cannot be fully avoided). 4. Speaking up in undesirable or unexpected situations requires courage of workers and deserves recognition by leaders and co-workers. 5. Provide remedial feedback to those who engage in undesirable SHW behaviours (e.g. unsafe actions) and provide sanctions after negative behaviour of workers only in cases where rules were consciously violated, and conditions for good behaviour were available (e.g. reliable tools and effective PPE). 												
Limitations												
Recognition or reward systems, which focus on narrowly defined outcomes for SHW behaviour, may become an aim in themselves, and may lead to unintended negative effects such as underreporting of unplanned events.												
How to measure (See more details in the ISSA guide to proactive leading indicators)												
<p>Option 1: Are workers given recognition for excellent SHW performance? (Yes/No)</p> <p>Option 2: How often are workers given recognition for excellent SHW performance? (Always or almost always, Frequently, Occasionally, Rarely, Never or very rarely)</p> <p>Option 3: Determine the number of identified cases of excellent SHW performance, and calculate what percentage were recognized in the past 12 months.</p>												
<p>Example option 3: In the last 12 months, 38 instances of “excellent” SHW performance were identified for leaders, and 99 instances for workers. Leaders were recognized 18 times (47%) for their safety performance, 8 (21%) for their health performance and 12 (32%) for their wellbeing performance. Workers were recognized for their safety performance 62 times (63%), 29 (29%) for their health performance and 8 (8%) for their wellbeing performance.</p>												
<table border="1"> <caption>Recognition Last 12 months</caption> <thead> <tr> <th>Group</th> <th>Safety (%)</th> <th>Health (%)</th> <th>Wellbeing (%)</th> </tr> </thead> <tbody> <tr> <td>Leaders (n=38)</td> <td>47%</td> <td>21%</td> <td>32%</td> </tr> <tr> <td>Workers (n=99)</td> <td>63%</td> <td>29%</td> <td>8%</td> </tr> </tbody> </table>	Group	Safety (%)	Health (%)	Wellbeing (%)	Leaders (n=38)	47%	21%	32%	Workers (n=99)	63%	29%	8%
Group	Safety (%)	Health (%)	Wellbeing (%)									
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Workers (n=99)	63%	29%	8%									

Selecting suitable indicators

To start, if all of the indicators are too much, especially for options 2 and 3, the basic idea is to select indicators with the greatest potential for SHW improvement. A good strategy is to first use the ISSA Guide on the 7 Golden Rules, to self-assess the organization's situation. The results can then be used to determine which Golden Rules can be the basis for significant improvements. If Golden Rules 1 and 5 are most important, indicators associated with these Golden Rules may be most relevant. Then it could be considered if the challenges surrounding SHW leadership are more at the middle management level (indicator 4.1: Pre-work briefings) or at the top management level (indicator 1.1: Visible leadership commitment). Likewise, it can be considered whether there are greater challenges in the implementation of technological innovations (indicator 5.1.) or in the procurement process (indicator 5.2).

Another relevant factor can be the differences in maturity between the three aspects of Safety, Health and Wellbeing. Many organizations are more advanced in their "safety" management than in the management of "health" and "wellbeing". In such a situation, it makes sense to focus on indicators for health and wellbeing, as they are already well-developed for safety. Then it is useful to elaborate on what is already a good (safety) practice in the organization, and thereby avoid setting up separate activities for health and wellbeing. Broadening the scope from already successful safety activities to health and wellbeing may be preferable, though the new focus may need dedicated communication within the organization. It may for instance be relevant to select indicator 4.1: Pre-work briefings which are frequently used to address safety, to measure how often pre-work meetings are used to give attention to health and/or wellbeing.

It is important to stress that ideal good practice would be using all indicators to address SHW holistically and in an integrated way, as part of business processes in the organization. However, the context in which the organization operates will point to key indicators to prioritize in the short, medium, and long term. Furthermore, depending on the activities of the organization, it may be necessary to tailor the indicators to fit organizational practices. This would be sensible as long as the indicators' aims are not diluted towards a more reactive focus.

Examples for tailoring the use of indicators

For options 2 and 3, it may be preferable to start with a few indicators, for example four. The personnel in the organization will have to become familiar with the indicators and recognize their value. When the first set of indicators is well-implemented, additional indicators can be introduced and broadened to ensure that all three SHW topics are included.

Below we give some examples.

Small company

Situation	General recommendation	Recommended indicators for option 2
We are a small company. Statistics do not work well for us.	Use all the indicators for option 1 (checklist - qualitative way) and select a few indicators for option 2. Leadership (1), Investing in people and participation (7) are the most important Golden Rules	1.1 Visible leadership commitment 1.2 Competent leadership 2.2 Learning from unplanned events 4.1 Pre-work briefings 5.2 Procurement 6.1 Initial training 7.1 Suggestions for improvement 7.2 Recognition and reward

Medium-sized company working more systematically

Situation	General recommendation	Recommended indicators for options 2 and 3
We are satisfied with our prevention culture, but our ways of working should be more systematic.	The most relevant Golden Rules for working more systematically are: Identify hazards and control risks (2), Define targets and programmes (3), Ensure a safe and healthy system (4), and Ensure SHW of machines, equipment and workplaces (5).	1.1 Visible leadership commitment 1.2 Competent leadership 2.1 Evaluating risk management 2.2 Learning from unplanned events 3.1 Workplace and job induction 3.2 Evaluating targeted programmes 4.2 Planning and organization of work 5.1 Innovation and change 5.2 Procurement

Large company developing a prevention culture

Situation	General recommendation	Recommended indicators for options 2 and 3
We have good SHW systems in place, but want to develop a more proactive prevention culture.	The most relevant Golden Rules for the development of a strong prevention culture are: Leadership and Commitment (1), Qualifications and Competence (6), and Investing in people and motivating by participation (7).	1.1 Visible leadership commitment 1.2 Competent leadership 2.2 Learning from unplanned events 4.1 Pre-work briefings 4.2 Planning and organization of work 5.2 Procurement 6.1 Initial training 6.2 Refresher training 7.1 Suggestions for improvement 7.2 Recognition and reward

Development of psychosocial risk management

Situation	General recommendation	Recommended indicators for options 2 and 3
Managing risk starts with risk assessment, but we have problems with the assessment of psychosocial risks.	The most relevant Golden Rules for identifying and addressing psychosocial risks are: Identify hazards and control risks (2), and Investing in people and motivate by participation (7).	1.1 Visible leadership commitment 1.2 Competent leadership 2.2 Learning from unplanned events 4.2 Planning and organization of work 6.1 Initial training 7.1 Suggestions for improvement 7.2 Recognition and reward

In the process of broadening the scope from Safety to SHW, make sure you do not facilitate the development of barriers between organizational silos, e.g. between HR and OSH departments; instead integrate the SHW aspects in the business processes as much as possible.

Working with contractors

Situation	General recommendation	Recommended indicators for options 2 and 3
We are a medium sized construction company; most of our operational work is done by personnel from (sub) contractors.	The most relevant Golden Rule for ensuring SHW among contractor personnel are: Managing hazards and controlling risks (2), while procurement (5.2) is also quite relevant.	For the organization: 5.1 Procurement For the organization as well as the contractors: 1.1 Visible leadership commitment 1.2 Competent leadership 2.1 Evaluating risk management 2.2 Learning from unplanned events 4.2 Planning and organization of work 6.2 Refresher training 7.2 Recognition and reward

Use by a labour inspectorate or social security agency

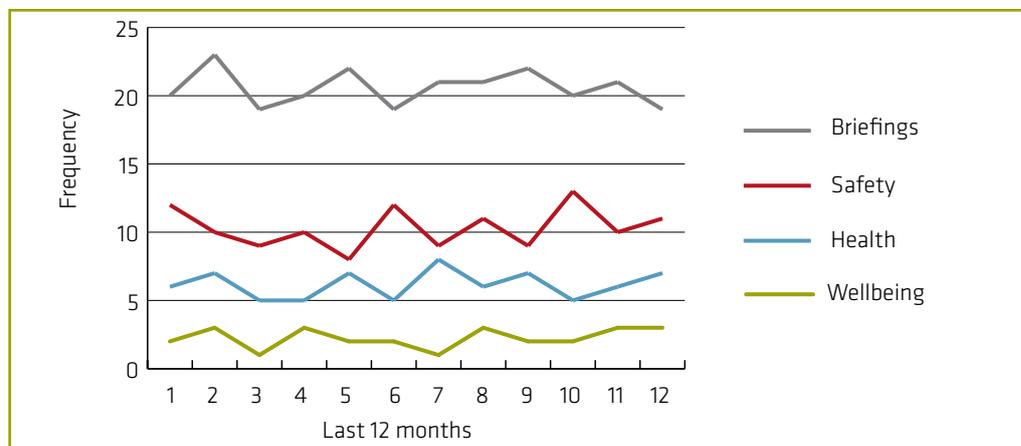
The indicators can also be used by intermediary organizations such as sector organizations, labour inspectorates and social security agencies, in order to stimulate a more proactive way of dealing with SHW among their target groups or member organizations.

Situation	General recommendation	Recommended way of working
We are a labour inspectorate and want to stimulate the adoption of VISION ZERO and the development of a prevention culture among our target organizations.	In principle, all 7 Golden Rules are relevant. See examples above.	Use option 1 to assess the situation in the company. When the outcomes are quite positive, follow up with option 2. Depending on the SHW risks, the development of SHW management and the level of the organizational culture it can be useful to promote the use of a selection of indicators. See the five examples above.

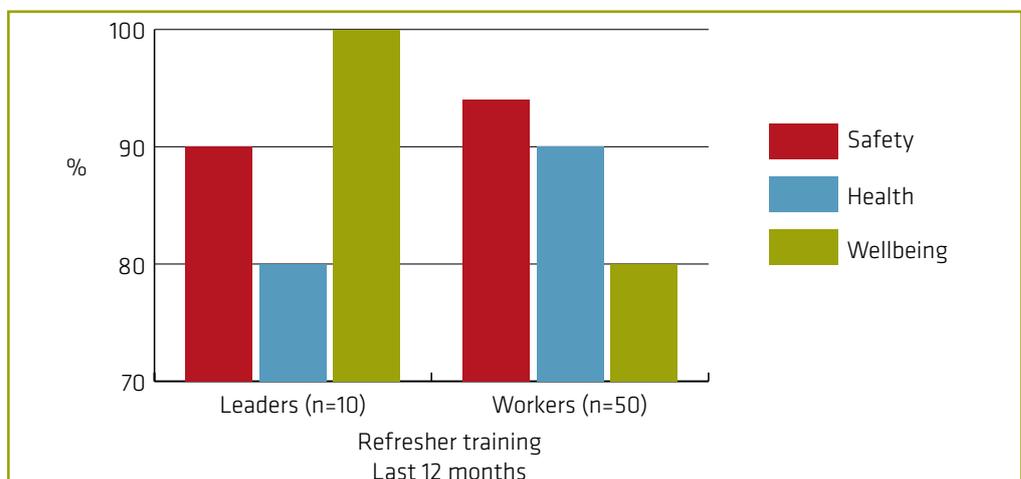
Presenting the outcomes

Examples of how the results of each indicator can be presented have been provided for options 1 and 2 in this guide, and for option 3 an example is given in each of the 14 fact sheets. Presenting the results and presenting development over time (such as monthly results over a 12-month period) is perhaps just as important as measuring them: they show whether the improvements in prevention the organization is aiming for are achieved, and where there is room for improvement. This is valuable feedback, which can help to make SHW activities more effective.

The example of the graph in fact sheet 4.1: Pre-work briefings shows a monthly trend over a 12-month period, where of the 20 briefings held in the first month, safety was an integrated part of the discussions in 12 of the briefings, health in 6, and wellbeing in 2.

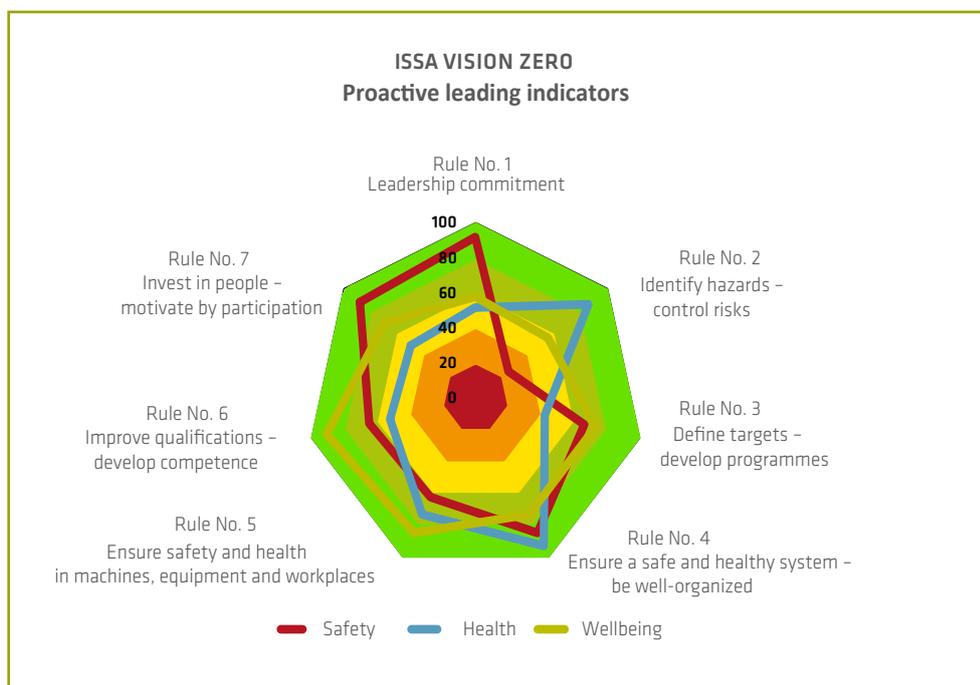


Another example of a graphical presentation is from fact sheet 6.2: Refresher training: An organization consists of 20 leaders and 100 workers. 10 of the leaders received refresher training over the last 12 months, in which safety was covered in the training for 9 (90%) of the leaders, health for 8 (80%), and wellbeing for all 10 (100%) leaders. 50 of the workers received refresher training in which safety was covered in the training for 47 (94%) of the workers, health for 45 (90%), and wellbeing for 40 (80%).



Radar or Spider Diagram

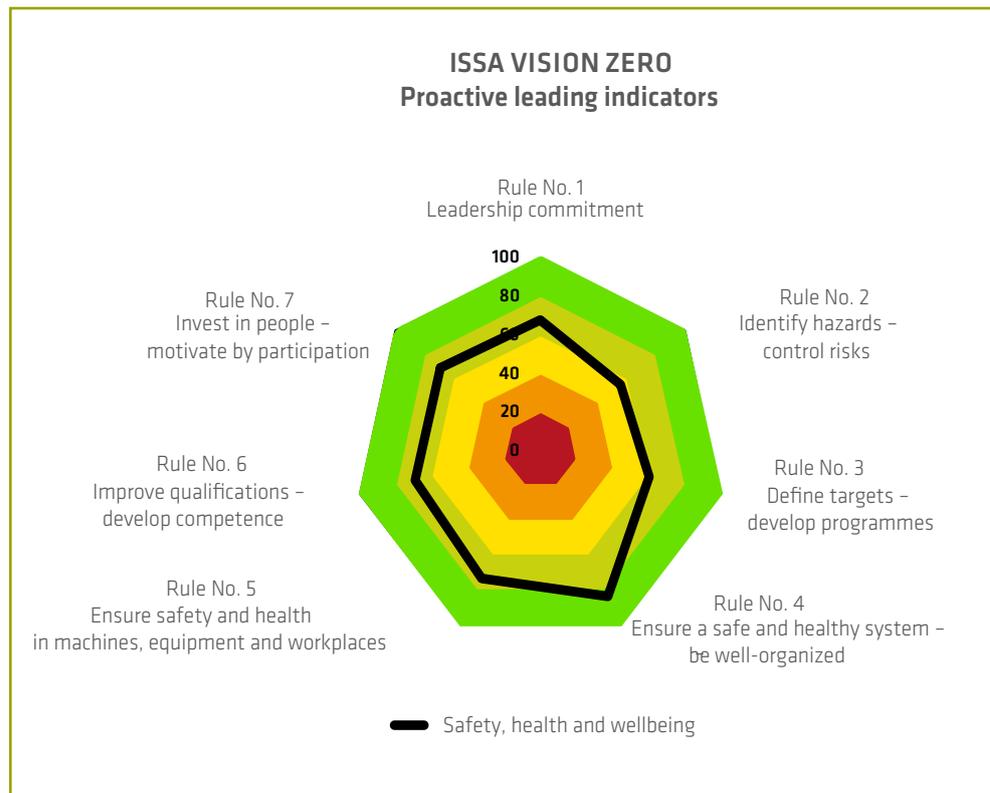
As illustrated above and in the fact sheets, the indicators can be presented one by one, and for each aspect of Safety, Health and Wellbeing. However, organizational leaders require an overview. A radar or spider diagram is one option of presenting an overview of all the indicators. Percentage results can be plotted into a radar (spider) diagram, based on the average of one or more leading indicators for each aspect of SHW and each Golden Rule (see figure below). This may be particularly relevant when all or most proactive leading indicators are used, using options 2 or 3. The five qualification levels (Achieving – Advancing – Progressing – Learning – Starting) can also be added to the diagram to make it clear where the SHW indicators are strongest and weakest. An example is given below.



Achieving	81–100%
Advancing	61–80%
Progressing	41–60%
Learning	21–40%
Starting	0–20%

It is important to acknowledge that VISION ZERO is meant to address all three aspects of Safety, Health and Wellbeing. Having a good indicator score for safety is not the same as a good score for VISION ZERO; in fact, it makes up only one-third of the score for VISION ZERO. This may be a reason to differentiate between the outcomes for the three aspects SHW, as shown on page 47.

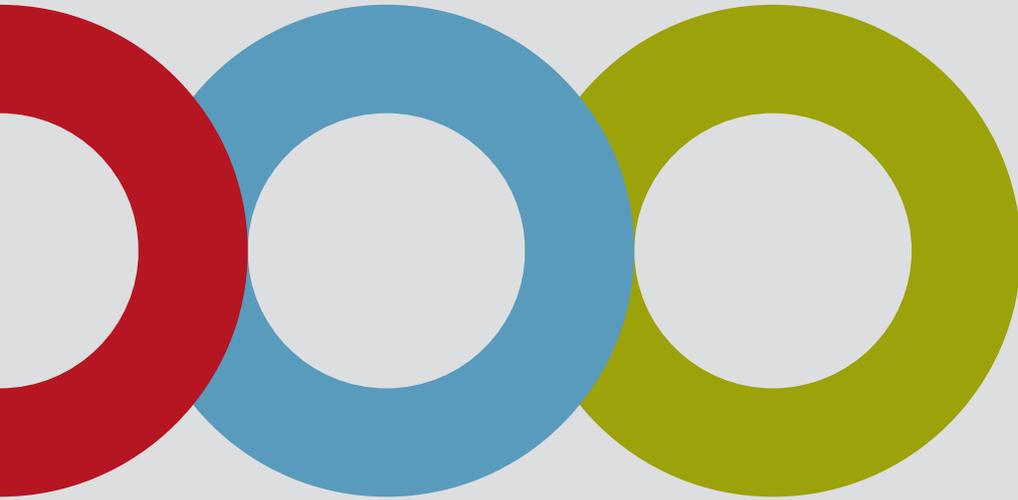
If SHW are really integrated in implementing VISION ZERO, the outcomes for the three aspects can also be combined into averages of all three SHW proactive leading indicators. Again, this can be plotted for each Golden Rule (see figure below).



Achieving	81–100%
Advancing	61–80%
Progressing	41–60%
Learning	21–40%
Starting	0–20%

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The VISION ZERO Proactive Leading Indicators Guide was prepared by a development team in consultation with a wide range of organizations and experts from around the world, the members of the ISSA Steering Committee, and ISSA's Special Commission on Prevention.

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