



MEASURING AND REPORTING WHS INFORMATION



LET'S TALK SAFETY

WORK HEALTH AND SAFETY (WHS) PERFORMANCE DATA INFORMS THE BUSINESS DECISIONS OF MANAGERS AND OTHER STAKEHOLDERS.

WHS reports often focus on measures such as Lost time injury (LTI) & LTI frequency rate (LTIFR) which are inappropriate for informing WHS due diligence and management decisions.

This guide helps business leaders obtain the information they need to exercise WHS due diligence. It outlines evidence that can help leaders answer four essential WHS questions.

1. What WHS hazards and risk does this business expose workers to?
2. What is the business doing to ensure workers' health and safety?
3. How successful is it in preventing injury/illness to people at work?
4. What is the impact of WHS on business performance?

THIS GUIDE IS BASED ON THE REPORT, **MEASURING AND REPORTING ON WORK HEALTH AND SAFETY** ISSUED BY SAFE WORK AUSTRALIA.

WHS DATA IS QUALITATIVE AND/OR QUANTITATIVE.



QUALITATIVE DATA IS DESCRIPTIVE

Observations and explanations.



QUANTITATIVE DATA IS NUMERICAL

Counts and measures.

Both are important.

- The numbers should provide insights into what might be working well, or not; what was expected, or unexpected; and where attention needs to be directed.
- They prompt 'how' and 'why' questions, leading to explanations that provide context, background and explain the results.

For example:

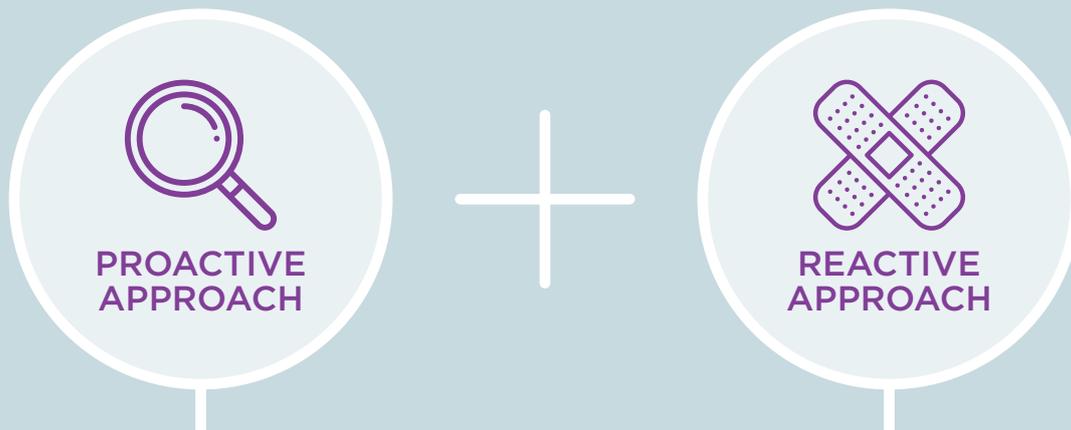
- **QUANTITATIVE**
Results for prior years, highlighting important trends or changes, and including industry or competitor averages where appropriate. Consistent presentation is useful.
- **QUALITATIVE**
Background information, descriptions of events or activities, and robust analysis of what the numbers mean.

1

WHAT WHS HAZARDS AND RISK DOES THIS BUSINESS EXPOSE WORKERS TO?

IDENTIFYING HAZARDS

DATA INFORMING RISK ASSESSMENTS SHOULD BE CONTEXT SPECIFIC AND INFORM ACTION. MOST OF THE ANSWERS TO THIS QUESTION WILL BE QUALITATIVE, I.E. DESCRIPTIONS OF HAZARDS AND RELATED RISKS.



PROACTIVE APPROACH

REACTIVE APPROACH

Assess existing systems and controls to reveal new hazards and / or opportunities for improvement. E.g.

- Indicators based on findings from performance audits (e.g. unguarded machines)
- Indicators of implementation of controls for critical risks (e.g. lifting devices purchased)

Examine past injuries, illnesses and other incidents also provides information about overlooked hazards or uncontrolled WHS risk, e.g.

- Injury/illness by category of at-risk body location
- Injury/illness outcomes by mechanism of injury, nature of injury
- Indicators of hazardous exposure (e.g. # chemical spills, or # exposures exceeding safe limits)

ASSESSING RISK EXPOSURE

Estimates of likelihood and some approaches to categorising consequence (e.g. “severe”, “moderate” and “minor”) are highly subjective and inherently unreliable.

A more robust approach is to assess residual risk according to the quality of the controls in place at that point in time and using objective categories with clear definitions (see below).

RECOMMENDED WHS RISK MATRIX EXPOSURE	CONSEQUENCE		
	CLASS 2 (temporary impairment)	CLASS 1 (death, incapacity or disability)	CATASTROPHIC (multiple fatality)
1. Hazard eliminated, no identifiable risk	Very low	Very low	Very low
2. Controls are in place, to the full extent reasonably practicable	Low	Moderate	Moderate
3. Existing controls seem adequate, but better controls are available	High	Critical	Critical
4. Existing controls are inadequate	Critical	Critical	Critical
5. Risk is uncontrolled	Critical	Critical	Critical

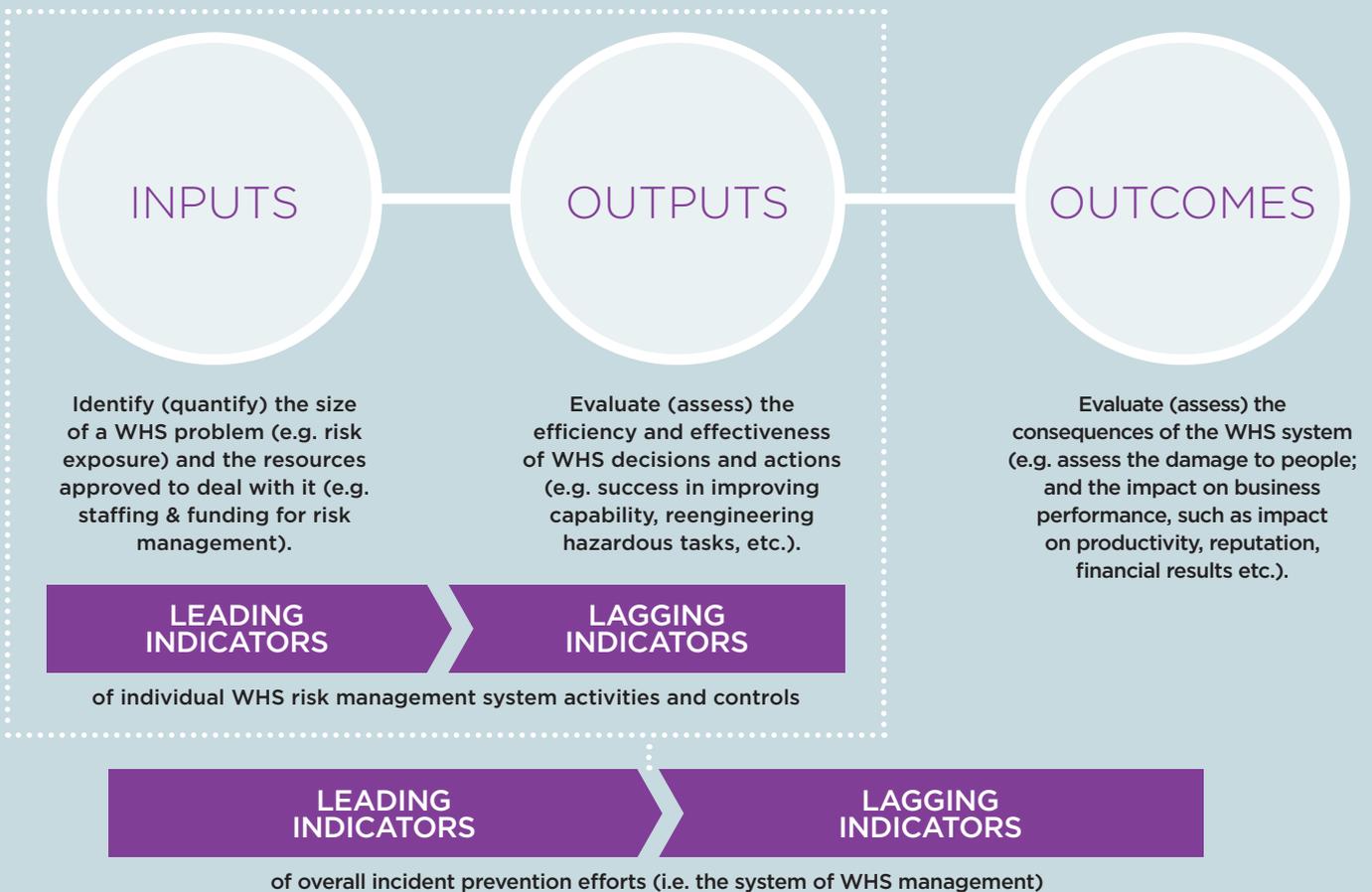
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WHAT IS THE BUSINESS DOING TO ENSURE WORKERS' HEALTH AND SAFETY?

WHS performance measures and indicators quantify the inputs, outputs and outcomes of a WHS risk management system. They identify whether WHS processes are implemented and working as intended; and if the WHS

management system is effective. Identify the important questions for your business. For each, consider lead (input) and lag (output) KPIs - both are important because they provide different information.

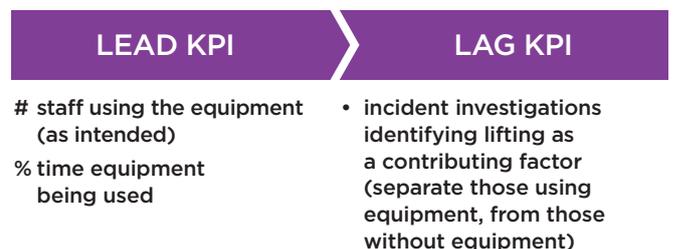
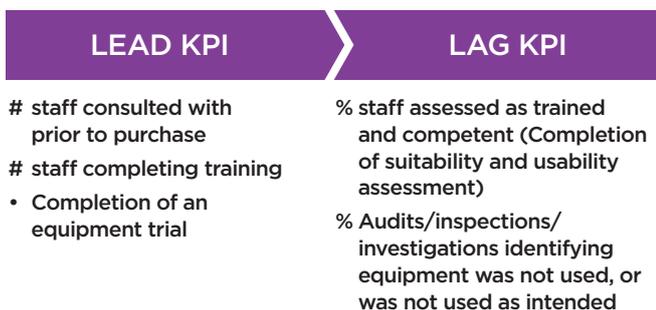
THE WHS RISK MANAGEMENT SYSTEM



We can illustrate this with the example of purchasing a lifting aid. A business could use lead and lag indicators:

- **TO ASSESS THE CONTROL (THE LIFTING AID)**
i.e. to quantify/verify the suitability of the lifting aid (fit for purpose) and assess its usability (ease of use, training requirements, storage location, maintenance requirements,)

- **ASSESS THE OUTCOME (ENSURING WHS)**
i.e. to assess whether having the lifting aid reduces the occurrence of those injuries that introducing the aid was expected to prevent.



MEASURING WHS SYSTEM INPUTS AND OUTPUTS

KPI CHOICES ARE SHAPED BY THE PRIORITIES, CONTEXT AND CULTURE OF YOUR BUSINESS. BEING ABLE TO MONITOR THE WHS CONTROLS MOST IMPORTANT TO YOUR BUSINESS IS MORE IMPORTANT THAN BENCHMARKING AGAINST SOMEONE ELSE'S.

1. IDENTIFY YOUR CRITICAL WHS CONTROLS.

Be selective. You can't measure everything. Start with a handful of critical activities/processes (WHS controls).

2. IDENTIFY LEADING KPI(S) FOR EACH WHS CONTROL.

These quantify and verify what you do; i.e. what resources and processes/activities were authorised and used?

3. IDENTIFY LAGGING KPI(S) FOR EACH WHS CONTROL.

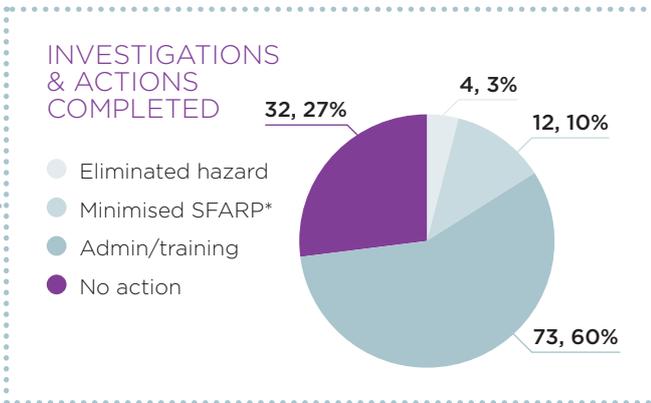
These assess how effective your efforts were; i.e. is the control working as intended?

4. MONITOR THE RESULTS.

Record and track results. Ensure the analysis and conclusions are valid and impartial. Investigate unexpected results.

5. REPORT AS NEEDED.

It doesn't all need to go in every report. Report results to draw attention to changes in performance (good / bad), or to highlight where further action is required.



EXAMPLES OF LEAD AND LAG INDICATORS FOR **WHS CONTROLS** COULD INCLUDE:

INCIDENT INVESTIGATIONS	MAINTENANCE SCHEDULE	APPROPRIATE ROSTERS	RISK REGISTER	PROCUREMENT POLICY	OFFICER TRAINING
LEAD: # investigations completed to schedule	LEAD: % major equipment assets covered by maintenance schedule	LEAD: % roles assessed for minimum (safe) staffing levels	LEAD: % risk register reviewed and updated (to schedule)	LEAD: % CAPEX appraisals reviewed for potential WHS issues	LEAD: % exec. meetings not including WHS briefings & industry updates
LAG: % completions with level 1 HOC (Eliminate hazard) actions implemented	LAG: # or % assets with planned maintenance overdue or deferred	LAG: # double shifts worked, or % shifts operating below minimum levels	LAG: # hazards identified in incident reports that were not on the risk register	LAG: % purchases involved in WHS incidents or requiring modification	LAG: % executives engaging in relevant discussion in the meetings

* So far as reasonably practicable.

3

HOW SUCCESSFUL ARE WE IN PREVENTING INJURY/ILLNESS TO WORKERS?

BUSINESS LEADERS NEED TO UNDERSTAND THE EXTENT OF HARM TO WORKERS.

Lost time injury data cannot answer this question because lost time injury (LTI) and LTI frequency rates (LTIFR) are productivity indicators, not valid and reliable measures of damage to people. LTIs answer questions about the impact of WHS on business, not impact on workers. See page 7.

To understand the human experience of work-related injury and illness, indicators must:

1. Capture categories of human impairment (see below).
2. Assess both the frequency and the severity of each injury and illness.
3. Be standardised so data is captured reliably, and users can easily interpret what the numbers mean and make comparisons across time and across companies.

COUNTING INJURY & ILLNESS

Useful measures of injury/illness frequency and severity are summarised below. Importantly, raw numbers are most useful for understanding how many people were harmed. Separating Class 1 and Class 2 provides more useful insight into those consequences than an aggregated 'severity rate'.

FREQUENCY MEASURES: HOW MANY PEOPLE WERE DAMAGED?

Recordable injuries (RI) (includes illnesses):

A recordable injury is any event that results in impairment to a worker, whether that be a loss of consciousness, medical treatment, restricted duties or lost time. They include all Class 1 and Class 2 events. For any business, RI is the most important measure of the frequency of harm to workers.

% Total recordable injury rate (TRIFR):

The frequency rate of RIs (TRIFR) is calculated when a business needs to compare RI performance across businesses of different sizes. Although not as informative as the raw number of RIs, providing both RI and TRIFR results allows a broad comparison of performance before and after a major business merger or restructure, or across businesses, or business units, that are very different in size or headcount.

TRIFR is calculated as the sum total of all recordable injuries occurring over a stated time period, divided by the number of hours worked during that period, multiplied by one million.

Near miss:

An event that could have resulted in a recordable injury or illness, but did not actually result in harm to a person.

Fatality

Permanent disability (total or partial disability)

Long term impairment (>6mths to full recovery)

Moderate impairment (>2wks but <6mths to full recovery)

Short impairment (<2 weeks to recovery)

No impairment

SEVERITY MEASURES: HOW BADLY WERE THEY DAMAGED?

Fatalities: A WHS event that resulted in death

Class 1:
High consequence injury or illness.
Non-fatal event that has a lifelong impact on the person - either permanent disability, disfigurement and/or human impairment that requires more than 6 months to recover fully. This may or may not involve lost time (e.g. hearing loss).

Class 2:
Temporary impairment
Any recordable injury that is not a Class 1 event. i.e. a Class 2 event is where an injury occurs and causes impairment lasting no longer than 6 months.

Class 3:
No physical, psychological damage to a person
Also, High potential injury: any Class 2 or Class 3 event that could foreseeably have resulted in a Class 1 (but didn't).

Breaking this data down into categories (e.g. by body location, mechanism and nature of injury etc.) can also provide useful additional information.

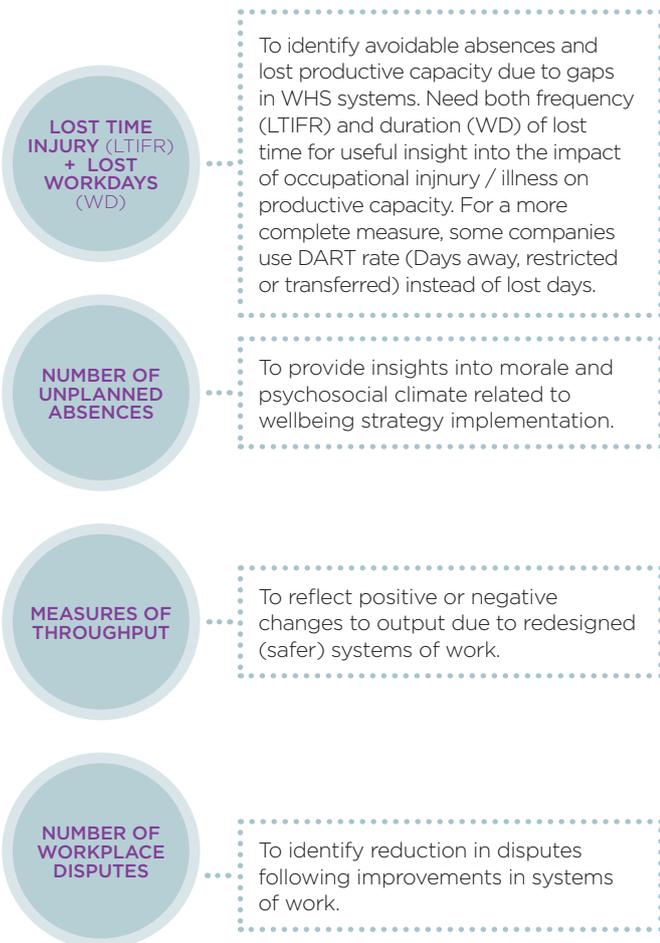
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WHAT IS THE IMPACT OF WHS ON BUSINESS PERFORMANCE?

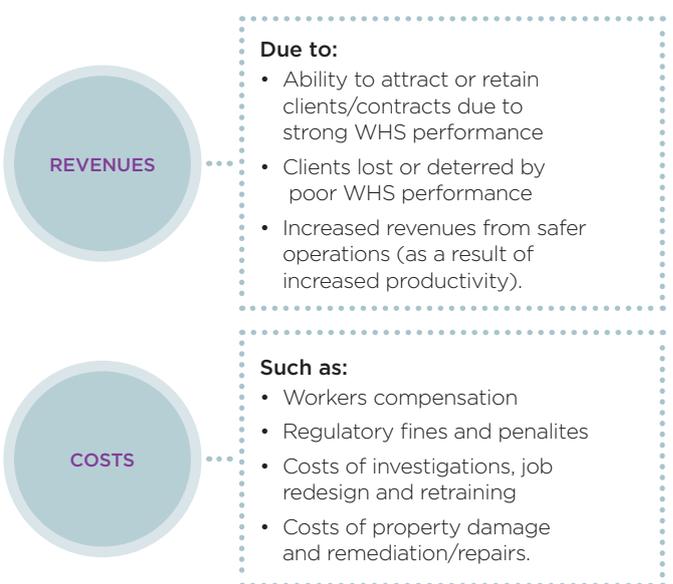
THE IMPACT OF WHS ON BUSINESS PERFORMANCE IS DIFFERENT TO ITS IMPACT ON AN INJURED WORKER.

Strong WHS performance can generate positive changes in business productivity and profitability. Conversely, poor WHS performance can lead to business disruption, poor morale, reputational damage and lost customers, which together results in increased costs or reduced revenues.

INDICATORS OF THE IMPACT OF WHS PERFORMANCE ON PRODUCTIVITY COULD INCLUDE:



INDICATORS OF THE IMPACT OF WHS PERFORMANCE ON PROFITABILITY (\$) POSITIVE OR NEGATIVE CHANGES IN:



SAMPLE WHS REPORT (TO OFFICERS)

1: OUR RISK PICTURE

1. External scan (legal or industry insights):

- New Code of Practice issued by Safe Work Australia on managing risks of plant
- A firm was prosecuted for serious crush injury (similar machine as ours) on the basis of inadequate supervision of new (labour hire) employees. A second was fined for replacing an engineering control with an administrative control (removing a guard). Fines exceeded \$380,000
- Suicide at (unrelated) Company [X] highlight risks associated with bullying and harassment.

2. Our risk update (snapshot of key hazards, incidents, actions)

- Interactions with machinery is our most **serious** (high consequence) hazard and injury rates relating to machinery have increased. Manual handling remains our most **frequent** hazard.
- Sudden increase in hand injuries following introduction of new machine (3 injuries this month).
- Safety Climate survey revealed a potential issue relating to staffing levels and time pressure. This was confirmed by findings of incident investigations completed this month (see below). Workloads are being reviewed. Supply chain schedules may also need review.

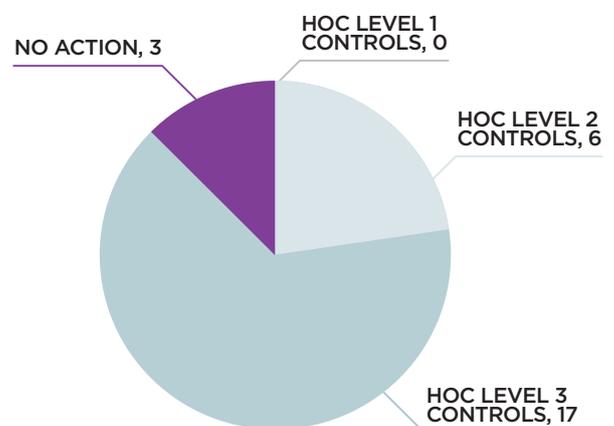
Consultation: hand injuries - employees identified a blockage issue with the new machine. Manufacturer has been on site and will make modifications ASAP. Interlocks on guarding are in place and operating. Employees have been instructed that power to the machine is to be off to clear blockages when they occur. Impact on production output of approximately 3% is expected.

Event reporting and incident investigations: In total, **18 events** were reported this month. Four resulted in injury (3 x hand injuries and 1 back injury). One of these and one near miss had potential for Class 1 injury. Investigations into these six incidents were commenced, with five of these completed and closed during the month.

WHS EVENTS				EVENT INVESTIGATION ENTITY				
PEOPLE DAMAGE	POTENTIAL DAMAGE			COMPLETED	OVERDUE	HAZARDS IDENTIFIED		
Hand injuries	3	Fatality/disability	1	Current month	5	1 13%	Machinery design	9
Back strain	1	Loss of eyesight	1	Overdue:			Time pressure	12
		Hand/Limb injuries	3	1 month	14	4 50%	Chemical handling	1
		Psychological injury	4	2-3 months	5	1 13%	Inadequate supervision	2
No injury	14	Chemical Burn injury	1	4 months+	2	2 25%	Workflow/layout	2
Total	18	Sprains & strains	13	TOTAL	26	8		

Significant progress was made on closing outstanding investigations from last month with 21 (75%) of the 28 carried forward EIs now closed. Of the 26 EIs closed during month, three required no further action, while 6 were resolved using Hierarchy of Control level 2 controls and 17 resolved using level 3 risk controls.

NOTE: THIS HIGHLIGHTS OUR CONTINUED RELIANCE ON LOWER LEVEL ADMINISTRATIVE CONTROLS, PRIMARILY TRAINING.



2: INJURY PREVENTION

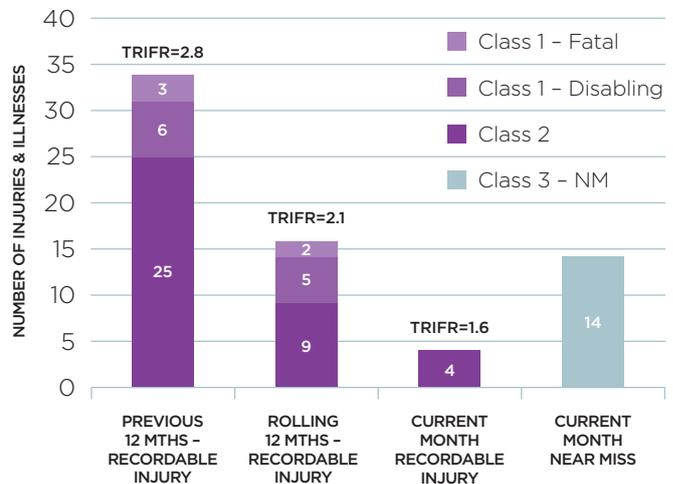
Significant incidents this month:

One worker from Business Unit A sustained a serious back injury on 26th February and is in hospital awaiting surgery (Injury severity: Class 1). Three hand injuries resulting from the new machine (above) were classified as recordable injuries (Injury severity: Class 2). One claim for psychological injury was lodged 27th February. This relates to a workplace dispute and bullying claim and is being assessed.

- **Two high potential incidents (HPI)** occurred this month.
 - **1 PSI** (process safety incident). Minor chemical [X] spill. No injuries or plant damage. The chemical handling process and equipment have been reviewed and revised.
 - **1 NM** (near miss), a pallet fell from a turning forklift just missing a worker. This incident had the potential to cause long term or permanent injury. The forklift driver was inexperienced and has received additional training and all floor supervisors are to undertake 'labour hire worker supervision' training next month.

Productivity implications:

- Rolling 12 month LTIFR = 1.2, down from 1.4. Total lost workdays this month = 12.
- Financial impact: \$12,000 cost to repair damaged equipment & \$22,500 late delivery penalty.



3: VERIFICATION

Safety criteria are being integrated into individual performance reviews and into preparation and approval processes for all capital expenditure proposals.

Safety inspections conducted this month:

- **Compliance audits:**
Average conformance rate = 83 %
(Below 95% acceptable threshold)
(i.e. Inspections completed to schedule = 95%,
X non-conformances detected = 13%)
- **Performance 'audits'/reviews:**
(i.e. inspections completed to schedule = 90%,
opportunities for improvement identified = 12)

One suggested improvement could eliminated crush injury risk (HOC 1), and 4 other suggested controls would reduce the risk significantly through HOC 2 interventions. These improvements are urgently being evaluated and costed.
- **External audits: Nil**

DIRECTORS HAVE REQUESTED A WHS BRIEFING NEXT WEEK

Verification of progress - authorised safety programs

- The three lifting aides approved for installation in November have now been installed and tested.
- **5 warehouse staff were involved in the trialling and testing of the three lifting aide.**

Safety climate survey (taken in January) results identified **18% fall in perceived quality of the safety climate** (mainly attributed to increased time pressure due to pre-post Christmas rush orders).

- **Workload reviews for office staff commenced this month - now 43% complete.**

Note. A Safe Work investigation is continuing into the Dec. incident in which XX lost two fingers and a thumb. Possible outcomes include prosecution, however negotiations for an Enforceable Undertaking are underway.

Compensation / medial costs accrued so far in relation to two workers sustaining crush injuries to the tips of fingers this month total \$14,375.

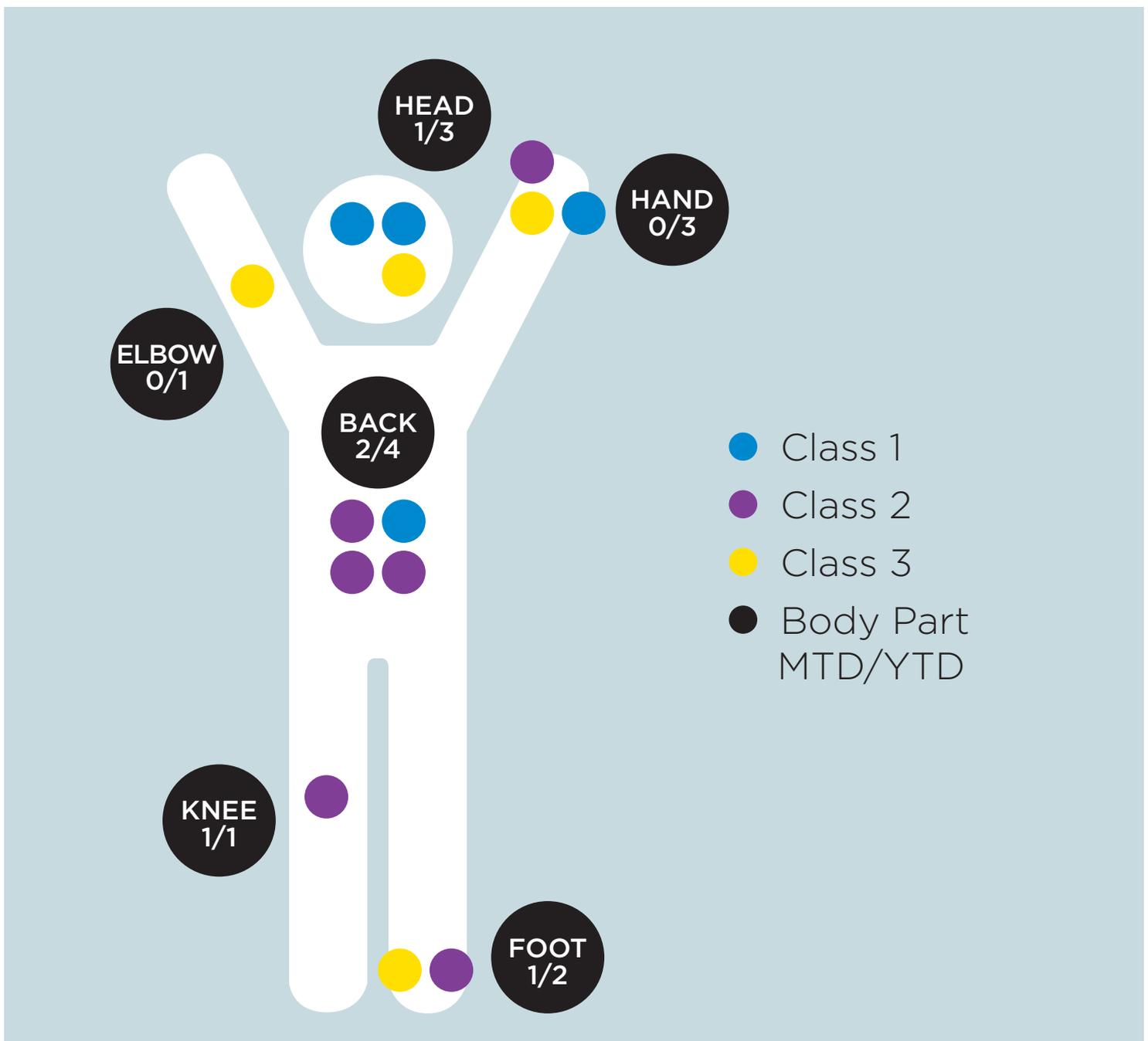
SUMMARY

Considerations for preparing useful reports for business leaders:

- **Reduce “noise”** by consulting users to identify those questions, concerns and knowledge gaps that need to be addressed.
- **Add value** by reporting high quality (relevant, reliable, valid) data and providing an executive summary to highlight important changes and challenges. Ensure users can access more detailed information as needed.
- **Provide context** as appropriate and ensure analysis of KPIs / performance is valid.
- **Present consistently**, where appropriate, to ensure data is comparable and easily interpreted.

- **Aggregate cautiously** to ensure important results are not hidden, obscured or overlooked and larger data sets.
- **Consider graphics** for communicating important information clearly and concisely.
- **Seek feedback** from users to enable continuous improvement.

For example, a single diagram can be used to show the frequency and severity of injury and illness outcomes as well as the body location, and at the same time compare current and prior year results or month-to-date and year-to-date (see below).



LINKS TO FURTHER INFORMATION

- **Measuring and reporting on work health and safety (Safe Work Australia)**

<https://www.safeworkaustralia.gov.au/system/files/documents/1802/measuring-and-reporting-on-work-health-and-safety.pdf>

- **GRI403 OHS Reporting Standard (Global Reporting Initiative)**

<https://www.globalreporting.org/standards/gri-standards-download-center/gri-403-occupational-health-and-safety-2018/>

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Information on the latest laws can be checked by visiting the NSW legislation website www.legislation.nsw.gov.au

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