### THE IMPACTS OF **UNRELIABLE SAFETY DATA**





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# Why is safety data critical to business decision making?

### **AGENDA**

- UNDER REPORTING AND THE DRIVERS OF IT
- FOCUSING ON THE RIGHT DATA FOR MAXIMUM IMPACT
- USING DATA TO REDUCE RISK SERIOUS INJURY EXPOSURE
- THE ROLE OF SAFETY CULTURE IN GATHERING DATA AND IMPLEMENTING CHANGE



## Why is underreporting an important topic to be talking about?

### WHAT DO WE MISS BY FAILING TO REPORT?

- The ability to see trends and themes and address issues proactively
- The ability to learn and improve from feedback
- The ability to share lessons learned wider
- The ability fix errors when they occur
- The ability to have a safer and more reliable business



## Underreporting – what does it look like?

a) 0-10%

b) 10-20%

c) 20-40%

d) 40% +

### **RESEARCH SAMPLE**

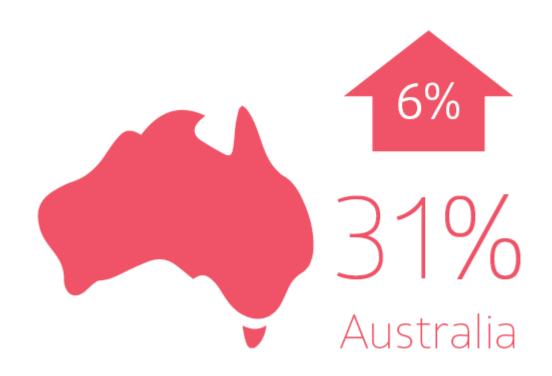


### **INCIDENTS UNREPORTED**





### **INCIDENTS UNREPORTED**





**EXPERIENCED AN INCIDENT** 

30%

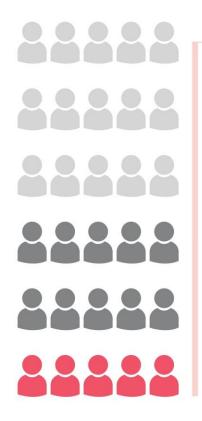
FAILED TO REPORT AT LEAST ONE INCIDENT

6.3

AVERAGE NUMBER OF INCIDENTS NOT REPORTED



### WHAT DOES THIS LOOK LIKE IN PRACTICE?



Consider an organisation with **3000 employees.** 

1500 (50%) employees

experience at least one incident over a 12-month period.

Of these,

450 (30%) employees

fail to report 6.3 incidents each.

2835 UNREPORTED INCIDENTS A YEAR



# Why does underreporting occur?

a) Underappreciation / lack of follow through by management

b) Fear / lack of trust

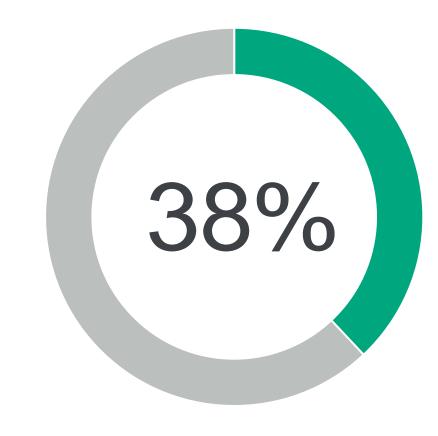
c) Difficult processes

d) Other – stick your thoughts in the Q&A box

### **DRIVER 1: UNDERAPPRECIATION**



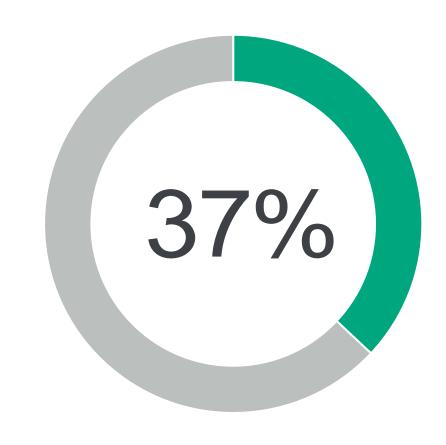
I took care of the problem myself



### **DRIVER 2: FEAR**

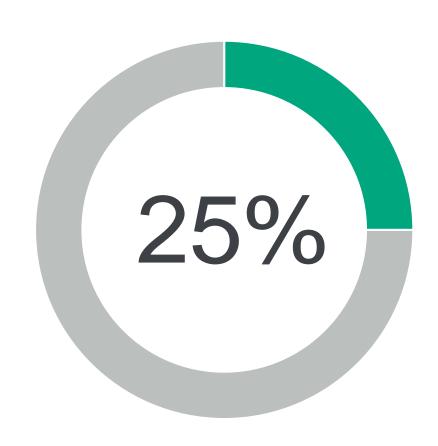


Putting stuff into [the reporting system] can be like putting your head in a noose



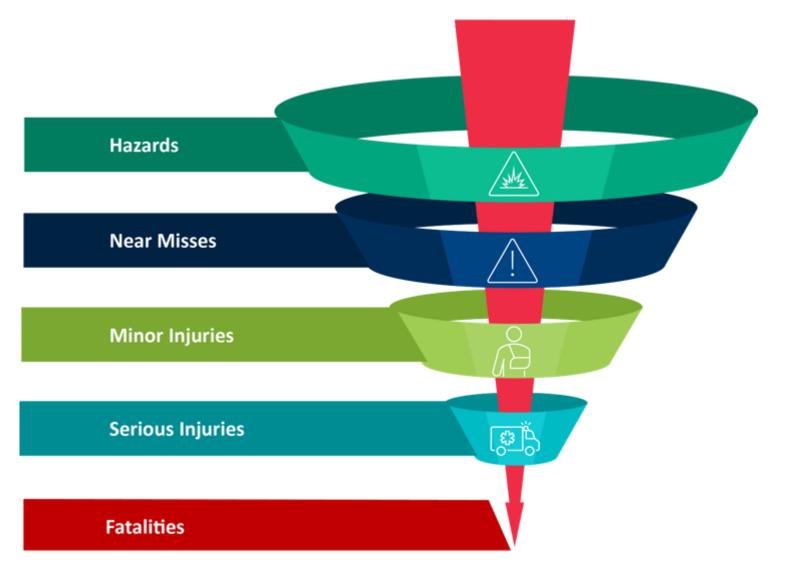
### **DRIVER 3: PROCESS**

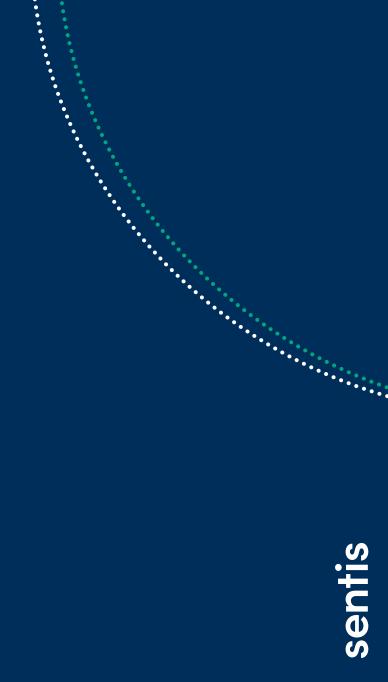
If you've ever gone to an ICAM, you'll think twice about reporting next time



# What are the implications for Serious Injury and Fatality Prevention?

### **UNDERSTANDING SIF POTENTIAL**





### USE YOUR INJURY AND NEAR MISS DATA TO BETTER UNDERSTAND SIF POTENTIAL

A and B examples both represent same outcome but very different severity potential:

Α

Employee fractures foot when they climb out of a truck cab, miss the bottom step, and slip 30cm to the ground. Their foot rolled off a small rock.

E

Employee fractures foot when backed over by a forklift truck. The forklift operator backed up without looking, and the backup alarm was not functioning.



### WHAT PERCENTAGE OF YOUR SERIOUS INJURY OR FATALITY POTENTIAL INCIDENTS GO UNDER THE RADAR?

a) None

b) 10 - 25%

c) 25 to 45%

d) 45%+

### (IN)EFFECTIVE GOVERNANCE OVER SIF

45%

of serious incidents fly under the radar\*

29%

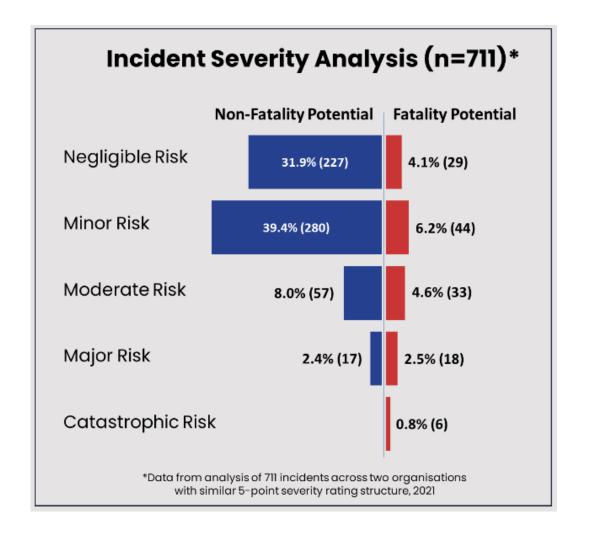
of incidents attract unnecessary effort\*

\*Incident Analytics<sup>©</sup> analysis of 2000+ incidents and near misses across multiple industry sectors 2019-21. Incidents reviewed for corporate risk rating accuracy:

- · 45% of incidents with serious or fatal potential were listed in lower corporate risk categories
- · 29% of incidents appearing in major corporate risk categories had NO serious or fatal potential



### (IN)EFFECTIVE GOVERNANCE OVER SIF





## Culture and Serious Injury and Fatality Prevention...

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### THE BIGGEST OPPORTUNITIES

Top five opportunity areas identified across sites operating at *Counterproductive* and *Public Compliance* levels of safety culture maturity.

Safety Culture Dimension	Opportunity Frequency (% of Sites)
Quality of safety procedures*	56%
Management safety commitment*	51%
Internal context*	48%
Willingness to report incidents and errors	40%
Employee safety performance*	37%

<sup>\*</sup>Denotes dimensions that have a strong correlation with safety culture maturity (Pearson Correlation ≥0.70)

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### **LESSONS FROM SITES DOING WELL**

Top five strength areas identified across sites operating at *Private Compliance* and *Mateship* levels of safety culture maturity.

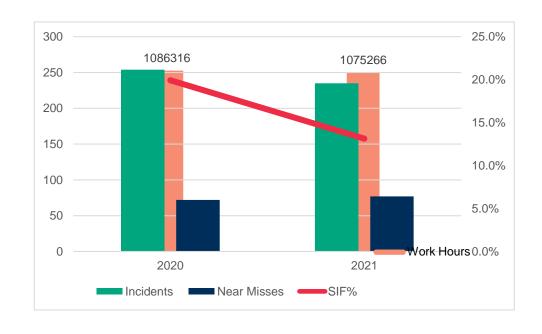
Safety Culture Dimension	Strength Frequency (% of Sites)
Safety mission and vision*	60%
Management safety commitment*	60%
Within-team safety communication	50%
Safety responsibility*	50%
Team support for safety	40%

<sup>\*</sup>Denotes dimensions that have a strong correlation with safety culture maturity (Pearson Correlation ≥0.70)

### **META INCIDENT ANALYSIS - CASE STUDY**

### Our meta-analysis of incidents:

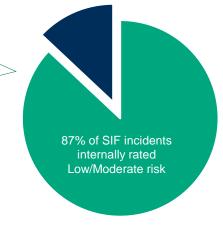
- 685 incidents and near miss events Jan 2020 to early Mar 2022 were reviewed for risk potential.
- 114 incidents (16.5%) were considered potential Serious Injury & Fatality (SIF) events and were then subject to detailed analysis.
- 1000+ hazards were explored for weak signals to eventual incidents.
- 50% of SIF incidents involved Motor Vehicle usage.

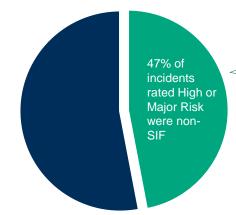


#### What we learnt:

- 1.0% reduction in work hours year on year
- 7.5% reduction in recordable incidents ('vehicle incident' and 'injury' event categories) year on year
- 7% increase in near misses reported year on year (note 32% of SIF incidents were categorised as 'near miss')
- 34.2% reduction in SIF incident frequency year on year

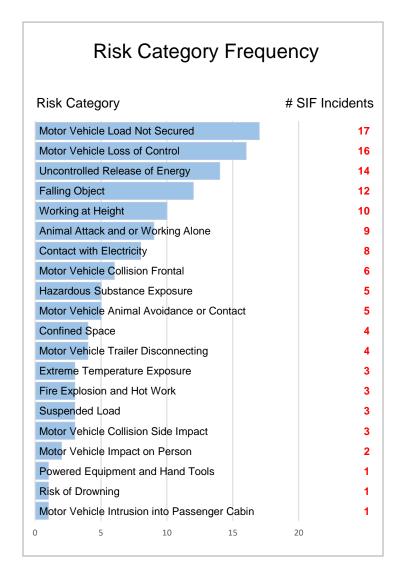
Risk matrix approach to internal rating of severity potential underplays the real risk, which means many incidents fly under the radar

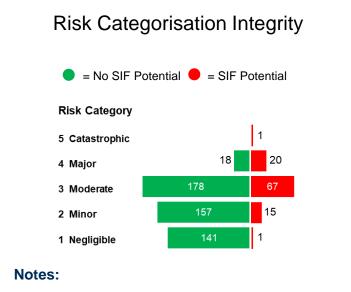




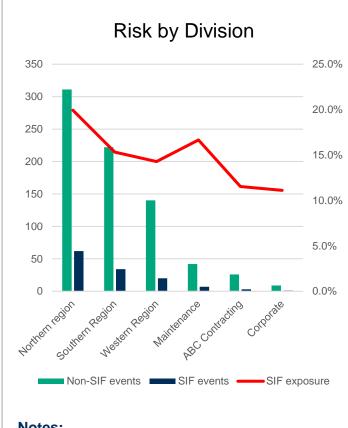
On the flip side, several incidents may have been over-emphasised or attracted unwarranted attention and/or investigation depth

### **META INCIDENT ANALYSIS - CASE STUDY CONT'D**





- · Red side of graph shows SIF events
- · Green side of graph shows non-SIF events
- · Total incidents are only those with a recorded potential rating (152 incidents with no potential rating in system – 23 were SIF)
- · 83 incidents should have been upgraded to Category 4 (Major)
- 18 incidents may have attracted excessive attention (categorised as major but NOT SIF)



#### Notes:

- Global SIF rate benchmark equates to ~20%\*
- Motor Vehicle-related SIF rate = 25+%

\*Martin, D.K. and Black, A. (Sep. 2015). Preventing serious injuries and fatalities.



### WHAT DOES IT LOOK LIKE TO MAKE USE OF YOUR SAFETY DATA

- Discriminate and increase reliability of high severity high consequence potential from low severity low consequence incidents
- Clarity on risk profile of activities that have highest SIF exposure
- 3 Strengthening of critical control management in the field
- Improvement of risk assessments, plant and equipment design and better engage during pre-starts
- Re-design high risk work that was succumb to auto-pilot

### WHERE ARE THE OPPORTUNITIES?

- Ensure we have set up the conditions to support reporting and insightful analysis of the data gathered
- Leaders should seek to understand why/how underreporting is occurring in your organisation. Respond positively to reports of safety incidents/near misses
- Ensure there is effective governance, reliable data and metrics for SIF exposure. Differentiate between SIF and non-SIF.
- Understand your risk profile and know your critical controls for high-risk activities
- 5 Adopt advanced incident analytics to enhance corporate learning

### **DISCOVER MORE**

### **Meta Incident Analysis**



Would you like more information on Sentis' Meta Incident Analysis?



#### **DISCOVER MORE**

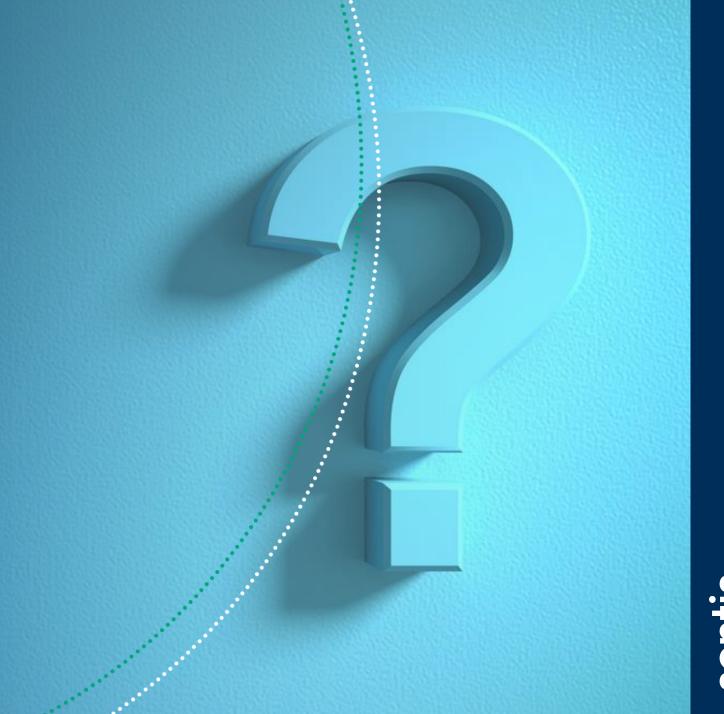
### Safety Climate Survey (Critical Risk)



Would you like more information on Sentis' Safety Climate Survey (Critical Risk)?



Q&A
Over to you



### Get in touch





in sentis.com.au 1300 653 042

