4. Risk Management – Part 2

SMS Webinar Series for heavy vehicle operations.

SMS Webinar Series

1. Introduction to SMS – what is it, and what does it mean
2. Leadership & Commitment
3. Risk Management – Hazards, Risks and Controls
4. **Risk Management – Ongoing Risk Review Incident Management**
5. Assurance, Monitoring & Continuous Improvement
6. People
7. Safety Systems
8. Tying it all together with ACAs, MAP and PSOE

SMS Webinar Series

Assessing Risk

1

IDENTIFY HAZARDS

Find out what could cause harm in your operations, vehicles, workplaces and environment.

2

ANALYSE THE RISK

Consider how likely it is that harm could occur and how severe the consequences would be.

3

EVALUATE THE RISK

Use a risk rating (e.g. low, medium, high, extreme) to determine which risks need attention first.

4

CONTROL THE RISK

Implement controls to eliminate risks or reduce them so far as is reasonably practicable.

5

REVIEW AND IMPROVE

Check that controls are working and review risks regularly or when things change.

Evaluating the Risk

LIKELIHOOD

How likely is it that the event could happen?

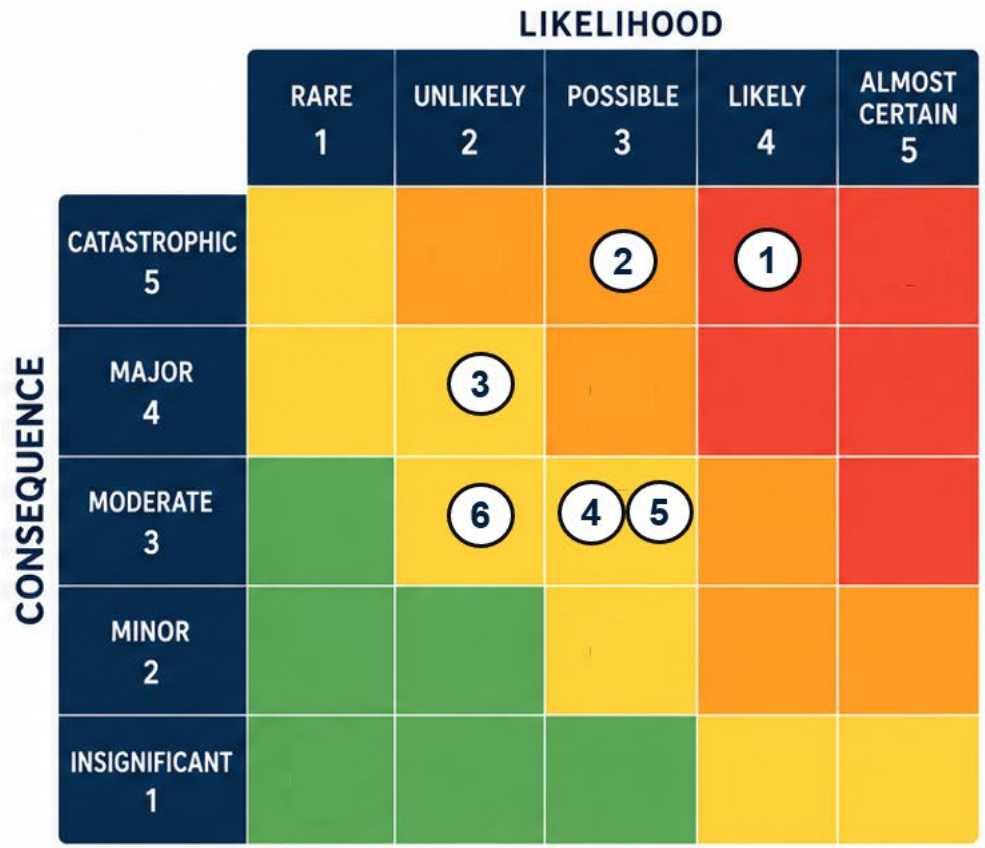
RATING	DEFINITION	PRACTICAL INTERPRETATION
5 Almost Certain	Expected to occur repeatedly.	Happens regularly unless something changes.
4 Likely	Will probably happen.	Has happened before or conditions suggest it will occur.
3 Possible	Might happen occasionally.	We should reasonably expect it could occur.
2 Unlikely	Could happen, but not expected.	Has happened elsewhere but not normally here.
1 Rare	Highly unlikely. Only in exceptional circumstances.	I'd be surprised if it happened.

CONSEQUENCE

If it happened, how severe would the outcome be?

RATING	DEFINITION	HEAVY VEHICLE EXAMPLES
5 Catastrophic	Fatality or multiple serious injuries, or widespread public harm.	• Fatal crash • Multiple fatalities • Major hazardous goods incident • Catastrophic public impact
4 Major	Serious injury, major damage or major operational impact.	• Single serious injury • Major vehicle damage • Major environmental impact • Extended road closure
3 Moderate	Medical treatment injury, significant damage or operational disruption.	• Breakdown requiring recovery • Significant load damage • Reportable near miss • Environmental spill requiring clean-up
2 Minor	Minor injury or minor property damage. Short disruption.	• Small reversing scrape • Minor vehicle damage • First aid injury • Short delay
1 Insignificant	Little or no impact. No injury. Minimal disruption.	• Minor paperwork error • Small cosmetic damage • No operational impact

Worked Example



#	HAZARD	RISK DESCRIPTION	LIKELIHOOD	CONSEQUENCE
1	Driver fatigue	Long hours or inadequate rest leading to fatigue and reduced alertness.	4 Likely	5 Catastrophic
2	Uneven load	Loss of control on curves or uneven roads causing vehicle rollover.	3 Possible	5 Catastrophic
3	Poor vehicle maintenance	Mechanical defects or poor maintenance leading to vehicle failure.	2 Unlikely	4 Major
4	Load shift / inadequate restraint	Load not secured properly causing shift, loss of control or load spill.	3 Possible	3 Moderate
5	Speeding	Exceeding speed limits or driving too fast for conditions.	3 Possible	3 Moderate
6	Adverse weather conditions	Rain, fog or strong winds reducing visibility and road grip.	2 Unlikely	3 Moderate

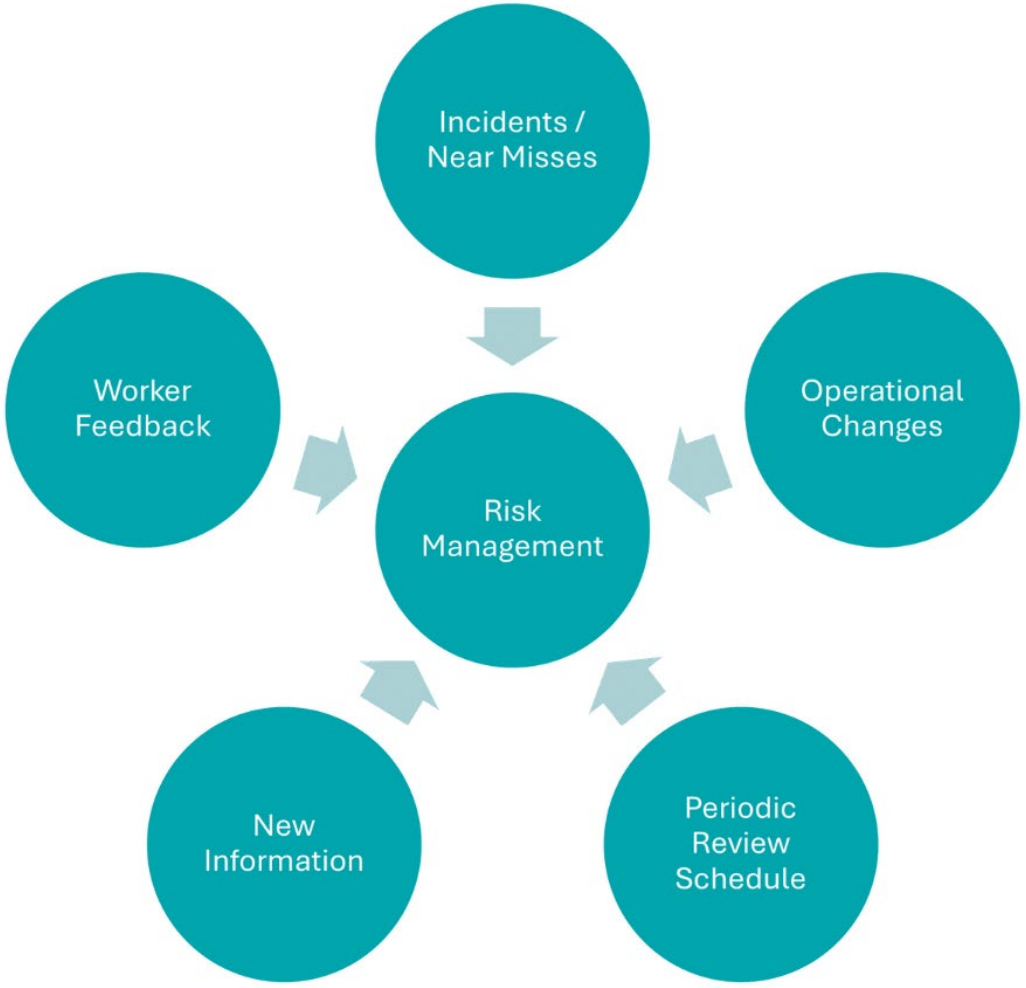
RISK RATING KEY

- LOW (Manage)
- MEDIUM (Monitor)
- HIGH (Action)
- EXTREME (Urgent Action)

Ongoing Risk Management

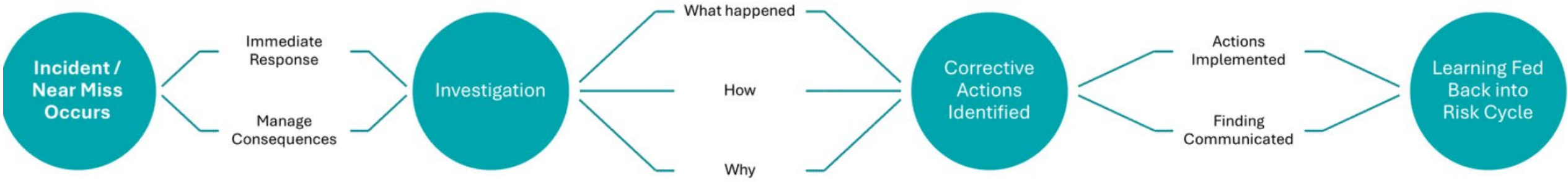
Key triggers for review:

- Incidents, near misses, or non-conformances
- Changes to operations: new routes, vehicles, freight types, customers, personnel, or sites
- Changes to the regulatory environment or accreditation requirements
- Patterns in operational data: repeated defects, scheduling overruns, fatigue indicators
- Feedback from drivers, supervisors, or other chain of responsibility parties
- Periodic review: scheduled at intervals proportionate to the risk level of the activities



Incident Investigation and Learning Process

1. Respond promptly and proportionately to incidents, near misses, hazards, and non-conformances
2. Manage immediate consequences first — then ensure underlying causes are investigated
3. Investigate to understand what happened, how, and why — with a focus on contributing factors, not blame
4. Consider systemic issues, work practices, equipment, human factors, and third-party interfaces as potential contributors
5. Identify and implement corrective actions directed at underlying causes, not just immediate symptoms
6. Communicate findings and lessons learned to those affected by the issues identified
7. Treat near misses as seriously as incidents — they are early warnings of controls that are not working



Next Series & Questions

DATE	TOPIC	TIME
Wed 17 June	Introduction to Safety Management Systems (SMS) – what they are and why they matter	8am AEST
Wed 24 June	Leadership and Commitment	8am AEST
Wed 1 July	Risk Management – Hazards, Risks and Controls	8am AEST
Wed 8 July	Risk Management – Incident Management and Ongoing Risk Review	8am AEST
Wed 15 July	**Assurance, Performance Monitoring and Continuous Improvement**	**8am AEST**
Wed 22 July	People	8am AEST
Wed 29 July	Safety Systems	8am AEST
Wed 5 August	Bringing it all together – Accreditation Compliance Accreditation (ACA),Maintenance Assurance Program (MAP), Present, Suitable, Operating and Effective (PSOE) Audit method	8am AEST

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