Readi™

# Buyer's Guide: How to Purchase a Fatigue Risk Management System

For Safety, Health, and Operations Leaders in Safety-Critical Industries

Understanding, Evaluating, and Purchasing Fatigue Risk Management Technology

## Fatigue Is a Risk You Can't Afford to Ignore

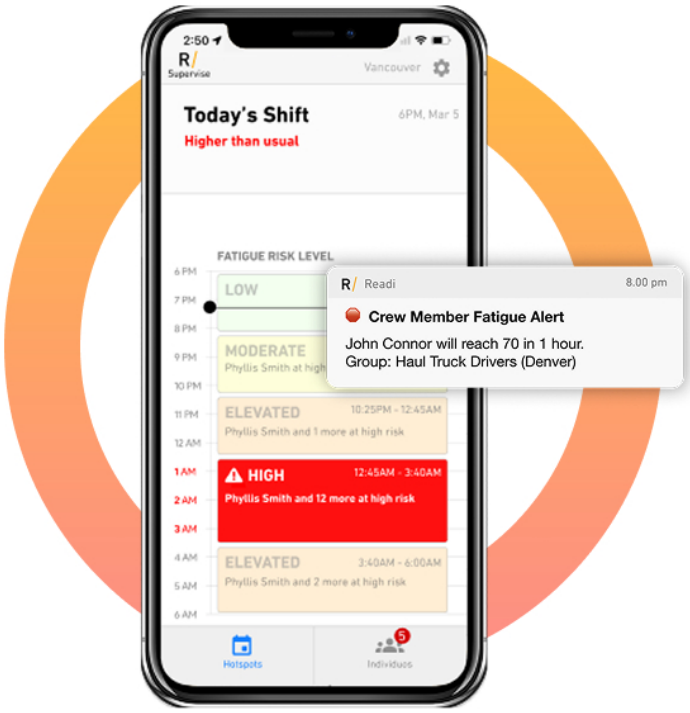
In industries with 24/7 operations, fatigue contributes to over 20% of serious transportation incidents and nearly doubles the risk of workplace injury.

A single misjudgment or lapse due to fatigue can result in serious injury, downtime, or worse. Yet many organizations still rely on outdated, reactive systems—or no systems at all.

Fatigue affects not only safety, but also productivity, compliance, and costs.

A modern Fatigue Risk Management System (FRMS) is your opportunity to move from reactive management to proactive prevention.

This guide helps you understand what to look for in an FRMS and how to evaluate a solution that fits your unique operational environment.

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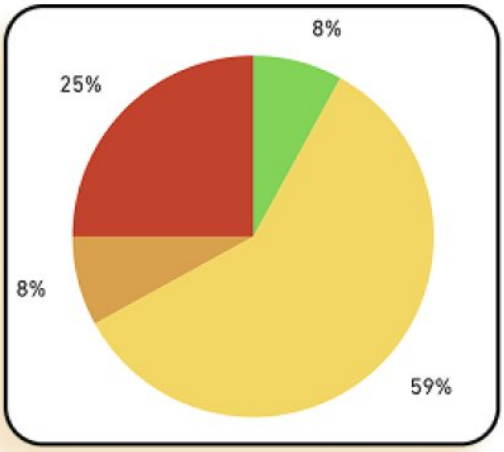
# By the Numbers

Night shift workers sleep an average of one to four hours less than daytime workers, increasing fatigue risk. (Therapy in Sleep Medicine)

An estimated 65% of mining haul truck accidents are attributable to operator fatigue. (Caterpillar Global Mining)

Fatigue contributes to 13% to 40% of accidents in the trucking industry (FMCSA, ECRS, NTSB)

45% of utilities employees report working high-risk hours and long commutes, while 28% report working long shifts and 83% report working a demanding job – all risk factors that contribute to fatigue at work. (NSC)

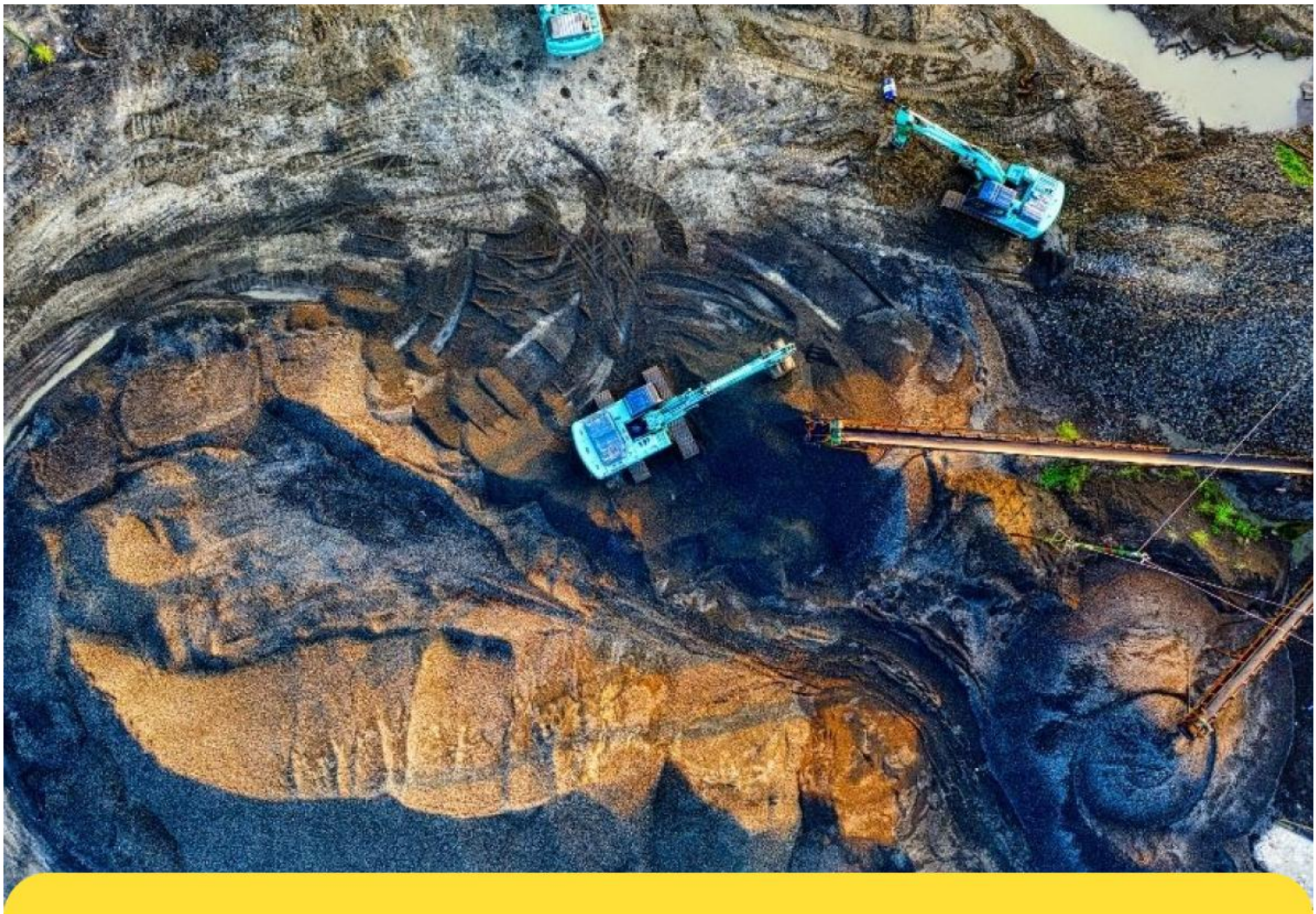



Oil and gas workers are 8.5 times more likely to die in a motor vehicle accident while on the job than workers in other industries (ISHN)
Motor vehicle crashes are the leading cause of workplace fatalities (NSC). Drowsiness and fatigue increase the risk of traffic accidents by 11 times (PSD).

Peak risk time: Fatigue-related crashes occur most frequently between midnight and 6 a.m., as well as in the late afternoon, coinciding with dips in the body's circadian rhythm. (NHTSA)

93% of employers feel fatigue is a safety issue, but just 72% of employees agree. This indicates that employees are not good judges of their own fatigue, signaling a need for employers to invest in fatigue risk management systems (NSC)

Fatigue-related road accidents are 3x more likely to result in severe injury or death (Accident Analysis and Prevention)



## What Is a Fatigue Risk Management System?

A FRMS is a proactive safety system that predicts and mitigates fatigue risk before it results in safety or performance incidents.

An effective FRMS should:

- Predict when and where fatigue risk will occur
- Integrate directly into existing operational workflows without adding additional work
- Support frontline supervisors in taking action to mitigate fatigue risk
- Empower safety leaders with performance-driven reporting

## What's the Difference between a Reactive and Predictive FRMS?

| Reactive Systems | Predictive FRMS |
| --- | --- |
| ✓ Alert after a fatigue event occurs | ✓ Predict risk before shifts begin |
| ✓ Focus on sleep logging only | ✓ Provide actionable fatigue scores |
| ✓ Supervisor is unaware until alarm | ✓ Supervisor alerted daily pre-shift |
| ✓ High false positives (e.g., cameras) | ✓ Personalized fatigue profiles per user |
| ✓ Disconnected from operations | ✓ Integrated into daily planning workflows |

# Key Capabilities to Look For in an FRMS

### Support flexible data collection

Wearables, ML, or a hybrid approach – the solution should fit the way your business already operates

### Enable decision making

With full data governance controls

### Predict fatigue proactively

Ideally, find a provider that offers personalized fatigue scores hour by hour for the entire shift ahead

### Respect workforce privacy

With full data governance controls

### Equip supervisors

The system should offer alerts, dashboards, fatigue forecasts, and action tracking and scheduling

### Fit into daily operations

Ideally, find a provider that offers personalized fatigue scores hour by hour for the entire shift ahead

### Offer training & support

From kickoff to full deployment to change management

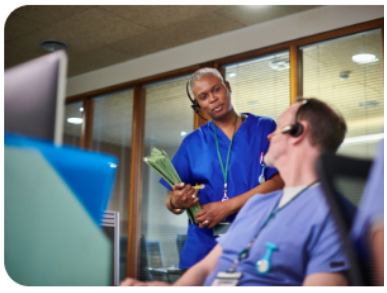
# Come Prepared: Building A Requirements Document

A well-crafted requirements document ensures you evaluate FRMS vendors against the right criteria—and keeps everyone aligned.

| Category | Requirement | Owner/Reviewer |
|---|---|---|
| Success Criteria | 50% reduction in fatigue alarms within 3 months | H&S Director |
| Wearable Requirement | Must provide wearable fatigue scores with backup scores based on machine learning | IT, Operations |
| Supervisor Adoption | Must integrate with existing daily shift review workflows | Ops, Site Supervisors |
| Reporting | Self-serve dashboards by user group (Ops, Safety, Execs) | Safety & Ops Leads |
| Privacy & Compliance | No raw sleep data shown to supervisors | Legal, Union Rep |
| System Integration | Integrate with Time & Attendance via CSV or API | IT |
| Change Management | Supervisor playbook and onboarding checklist provided | H&S, Training Manager |
| Pilot Support | Mid-point review + fatigue risk assessment included | Project Sponsor |
| Analytics | View fatigue trends and key KPIs by crew, site, and role over time | Exec, Ops, Safety |

# Work with stakeholders across departments to define:

- **Health & Safety** — safety outcomes, success metrics, training needs, alignment with regulatory standards
- **Operations Leaders** — how the tool should support productivity and fit into existing workflows
- **IT** — integration requirements, data flow, and security protocols
- **Legal & HR** — compliance with data privacy laws, union agreements, and vendor contracts
- **Finance/ Procurement** — total cost of ownership, budget allocation, and ROI modeling
- **Supervisors/ dispatchers** — Must-have features & capabilities
- **Executives** — business case justification, change management needs



# Questions to Ask an FRMS Provider Before You Buy

When evaluating fatigue risk management systems, the questions you ask can reveal how robust, scalable, and actionable the platform really is. Below are key questions to consider and examples of strong answers.

### How is fatigue risk calculated and validated?

Based on a biomathematical model like SAFTE™, peer-reviewed and validated in real-world operations.

### Do you support integration with ELDs or T&A platforms?

Yes—standard CSV exports or direct API integration.

### Do you offer both wearable and non-wearable data options?

Yes—wearables for sleep tracking or ML-based modeling via roster + questionnaire.

### What post-implementation support do you offer?

Dedicated CSM, quarterly business reviews, KPI health checks.

### Can supervisors act in real time on fatigue alerts?

Yes—via a mobile/desktop dashboard that flags high-risk workers pre-shift, with tools to log countermeasures.

### Can I measure success across multiple sites or operations?

Yes. You can track KPIs at the site or crew level and roll up trends across your entire enterprise.

### What does your change management support include?

Supervisor playbooks, communication templates, and weekly check-ins during pilot and rollout.

### How are KPIs tracked and reported?

Admins can self-serve dashboards by site, team, and time period, plus optional weekly email summaries.

### Can the platform work underground or without connectivity?

Yes—The platform stores data offline and syncs at the end of shift.

### Can we expand site-by-site over time?

Yes—platform supports phased rollouts with regional analytics roll-ups.

### Can we see real customer dashboards and outcomes (anonymized)?

Yes. We provide anonymized dashboards from successful deployments to show how teams track trends, adoption, and operational outcomes.

### How does the platform handle union and privacy concerns?

Supervisors only see fatigue scores, not raw sleep data. Privacy is built in by design and vendor has experience gaining union approval.

### How do you ensure supervisor adoption?

Real-time dashboards, customizable fatigue thresholds, and low-friction workflows.

### Do you have experience in my industry (e.g., mining, transport)?

Yes. For example, Readi is actively used in mining (surface and underground), trucking fleets, utilities, construction, and oil & gas. Our system is built for safety-sensitive, shift-based operations and supports environments without connectivity.

# Your Quick Checklist for Evaluating and Buying a Fatigue Risk Management System

- **Assemble your internal evaluation team**
  – include IT, Legal, Ops, Safety, HR, and Finance
- **Create your fatigue risk requirements document**
  – align on success metrics, user needs, integrations
- **Shortlist FRMS vendors**
  – use the evaluation questions and checklist in this guide
- **Run a pilot**
  – with weekly check-ins, mid-point review, and disruption analysis
- **Define expansion triggers**
  – such as X% supervisor adoption, reduction in fatigued hours, or union approval
- **Build a rollout roadmap**
  – prioritize operationally ready groups, prepare SOPs, and align stakeholders
- **Institutionalize reporting**
  – schedule weekly and monthly fatigue KPI reviews into existing meetings
- **Share early success stories**
  – to accelerate adoption across teams


## Readi™ /

Now that you're ready to start evaluating fatigue risk management systems, take the next step and **request a demo** to explore how **Readi**, Fatigue Science's predictive fatigue risk management system, can improve safety and productivity on your site.

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