

ALERTMETER[®] USE CASES



Predictive Safety

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Summary Overview

AlertMeter® is a 60-second, image-based, game-like test taken at start of shift by all workers in an organization. It is a unique and disruptive technology that addresses safety, risk, and performance for almost any company that addresses client challenges related to both function and market. It is a new way of providing assurance that each and every worker is cognitively fit and safe to start their day. No other technology can evaluate a person's cognitive fitness at start of each shift as compared to their normal cognitive function. A simple way to think about AlertMeter® is as a Cognitive Impairment Management System. It is more than a test for cognitive impairment--it provides workflows, notifications and management tools that allow an organization to fully realize the advantages of this NIOSH validated, top-level cognitive screen for every employee every day. It is normally used at start of shift and often mid-shift or prior to engaging in a critical task. Built in APIs allow clients and contractors to connect AlertMeter® to mission critical systems such as worker credentialing, timekeeping systems, telematics systems, geofencing and site access control systems. By extending AlertMeter® services to these mission critical services, clients and suppliers receive safety, productivity, and risk reduction benefits. Integration to other mission critical applications can streamline and automate the utilization of the system and further increase financial gain. Operations can also mandate AlertMeter® utilization by suppliers' staff working on corporate sites, thereby assuring that everyone on site is cognitively fit for work every day.

Risk Mitigation

Across all industries, AlertMeter® has been proven to be a powerful tool to mitigate risk driven by worker errors and inattention.

AlertMeter® is sensitive to a variety of factors and acts a top-level screen to identify cognitive impairment from factors such as:

- Fatigue
- Circadian impact from rotating shifts
- Emotional distress/stress
- Family crisis
- Drugs and alcohol

Cognitively impaired workers cost companies money beyond safety concerns.

- Quality
- Damages i.e., equipment repairs, fees and fines from customers for poor performance
- Damage to company image or reputation
- Customer service complaints
- Reduced performance
- Third party claims and litigation
- Temp workers hired to replace injured workers
- Overtime expense when someone is out with an injury
- Workers comp claims
- Increased insurance rates due to high level of incidents

Current AlertMeter® clients in various industries have seen significant financial returns.

- 20% - 35% Overall Reduction of Accidents
- 15% - 55% Reduction in Costs of Accidents
- 25% - 70% Reduction in Worker's Comp Claims
- 11% - 18% Improvement in Productivity
- 10% - 90% Reduction in Drug Testing Costs (Dependent on whether they modified their drug screening program after implementation of AlertMeter.)

Legalized Marijuana – Top Level Screen

Companies are adopting AlertMeter® as a strategy to detect impairment. Especially in states where marijuana has become legalized. While drug testing is an important safety procedure, AlertMeter® provides a daily screen that is sensitive to the impact of recent marijuana usage. Legalization of marijuana has created an increasingly confounding obstacle for workplaces that have a zero-tolerance policy. The fact that THC may remain in a person's body for three to four weeks after consumption further complicates the matter. Many companies are finding it difficult to find and retain good workers that can pass a pre-employment screen or have had to let go of excellent employees because they failed a random test after smoking three days earlier during their time off. AlertMeter is a way to effectively screen all workers every day for a fraction of the cost of drug testing. While AlertMeter® will not directly implicate marijuana or other substance abuse, it is an objective metric that may lead to conversation that could result in Reasonable Suspicion.

Site Access Control

AlertMeter® provides a utility that can be deployed by clients to ensure that workers arriving on site are cognitively fit. AlertMeter, is sensitive to impairment from drugs, alcohol, emotional distress, and fatigue. As a result, clients can be more confident of their employees' and more importantly their suppliers' employees' ability to stay safe on their properties.

- Workers are enrolled in AlertMeter® by the client or suppliers are mandated to require enrollment for any workers that will be performing duties on behalf of the client.
- Prior to reporting for duty workers are required to take the AlertMeter® test.
- At site check in, workers are required to show proof of passing the AlertMeter® test. Workflows are in place to enable supplier managers to engage with workers that struggle with the test on a particular day and provide necessary overrides or authentications regarding a worker's fitness for work that day.
- Integrations to systems that provide worker authentication and credentialing such as, site certification, background checks, drug tests etc. can be enhanced by including AlertMeter as a daily credentialing tool.
- Clients can use AlertMeter® data from both their own employee base and their supplier base for comparative analysis to discover and mitigate high risk groups of workers or suppliers.

Some industries where this applies include: Oil/gas, mining, manufacturing, construction / engineering.

Transport (Trains, Planes, Trucks, Service Fleets)

Numerous technologies are making headway in transport that promote driver safety and safe operation of mobile equipment. The majority of these are point of failure solutions (i.e., cameras that look in a driver's eyes to determine if they are falling asleep).

AlertMeter® brings a unique solution to any company that has employees operating company vehicles and equipment. AlertMeter® tests cognitive fitness BEFORE they ever get behind the wheel.

- Drivers take the test immediately after clock in or authentication on the vehicle telematics system.
- If the driver scores outside of their normal behavior range on AlertMeter, notifications are immediately sent to dispatch, terminal manager or the supervisor on duty who will then engage the driver in conversation to confirm their fitness to work. (~1.5% of all tests)
- If a driver fails to take the test before wheels roll, high priority notifications are sent out to the same group.
- Management uses AlertMeter® data to identify high risk drivers or operations that may be generating excessive cognitive fitness notifications beyond the rest of the organization.

Beyond drivers, AlertMeter® applies to service technicians, mechanics, rail workers, airline ground crews, maintenance workers and all ancillary services to these industries.

Lone Workers

Organizations with distributed work forces face unique challenges regarding worker management and safety. Managers and supervisors cannot have eyes on lone workers and as such do not have assurance that workers are cognitively fit to perform their duties in a safe and productive manner each day. As a SaaS based solution, AlertMeter® may be executed on any mobile device, phone, tablet, or truck mounted / internet connected device. This allows managers to contact workers that may be struggling to determine if they are fit to perform their duties for the day.

- Similar to transportation, workers take the test at the start of each shift and often mid shift or prior to a critical task.
- Managers receive notifications of failure to take test or scores outside of a person's normal baseline range. They can also monitor their teams on the AlertMeter® dashboard providing an "at a glance" view of the status of their crew at that point in time.
- Workers communicate with managers via existing technology or protocol when they struggle with the test.
- Manager can document conversations and decisions inside of the AlertMeter® system.
- Reporting is utilized to assist leadership in identifying groups or individuals needing extra attention in order to reduce overall risk to the organization.

Industries represented include oil and gas, utilities, mobile repair technicians.

Quality Control

Corporate risk is not always tied to safety mitigation. Workers that are not cognitively fit have been proven to make more mistakes on the job. Whether it is a manufacturing line or a worker doing underground locating work, mistakes cause damages which cost money. AlertMeter® is a good fit in organizations that may experience high costs related to these mistakes.

- Workflow and testing processes are similar to site access process described.
- In a manufacturing or warehousing environment, clients generally tie AlertMeter® to clock in procedures at start of shift.
- Workers normally take the test on kiosk-based tablets, often stationed near clock in stations.
- Clients generally experience a boost in productivity and reduction in quality issues that significantly offset costs associated with implementing AlertMeter.

Examples of industries where this is applicable include manufacturing and engineering.

Customer Service

Clients with high customer engagement require that their customer service staff be alert, friendly and engaged. AlertMeter® is sensitive to emotional distress, fatigue and other factors that may put a normally friendly and engaged service representative into a state where they are not representing the company in the best manner.

- Workflows are similar to site access as described above.
- Customer service representatives may take the test on their desktop or laptop computers or their personal mobile devices.
- Managers and supervisors engage with workers that score "in the red" in similar fashions as listed above.

- Existing HR policies and procedures are followed in cases where someone scores in the red. It is the conversation that determines worker disposition, not the AlertMeter® score.

Examples of use include call centers, customer service centers, retail, amusement parks and other entertainment venues.

24/7 Operations with Rotating Crews

Large, high production operations require rotating shifts to maximize production. Shift rotation fatigue can generate extreme risk to individuals and the organization. AlertMeter has been shown to be highly sensitive to fatigue and when utilized in these environments it can provide an effective solution for identifying and mitigating fatigue. AlertMeter may be further enhanced by upgrading to its' sister product PRISM.

PRISM is a Fatigue Risk Management Tool that includes AlertMeter results as one of numerous leading indicators to predict fatigue at the individual level. PRISM anticipates when fatigue will occur and functions in any work environment. It does not rely on wearables or cameras it is in fact complimentary to these technologies. It is union friendly and easy to implement. Leading indicators that drive fatigue risk predictions include individual clock in/out data, rotation pattern, job-based fatigue risk (i.e haul truck driver vs office worker) the AlertMeter test, commute time and sleep data collected through individual sleep diaries. PRISM then employs its proprietary circadian / biomathematical algorithms to calculate fatigue risk at the individual level. It provides dashboards and reporting to managers pre shift and real-time to advise them of who on their crew currently and in the future will pose the highest risk from fatigue. It also provides fatigue countermeasure suggestions to workers and managers to help workers more effectively manage fatigue. PRISM is the only proven fatigue mitigation product on the market that does not rely on wearable tech or other gadgets and can apply to everyone on a job site, not just drivers.

PRISM is applicable to almost any industry where fatigue risk is a concern. Most prevalent utilization currently is in the mining industry.

Case Studies/Testimonials

1. Savage Services: Transportation, Logistics, and Materials Handling

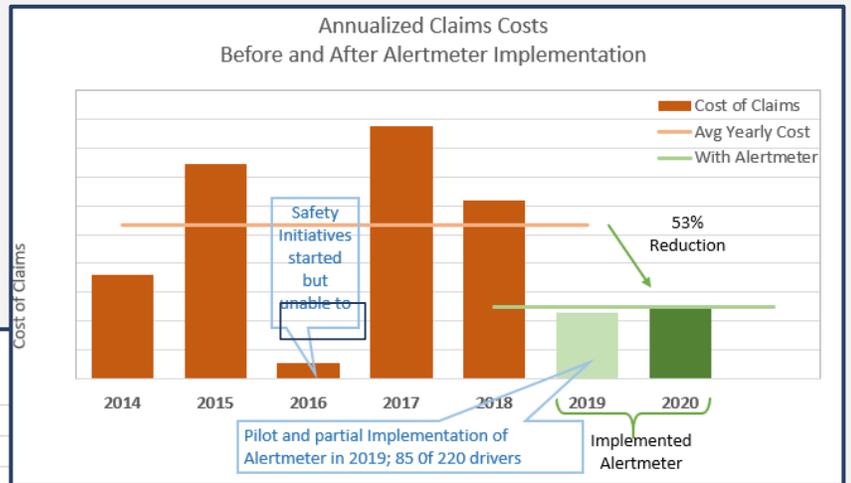
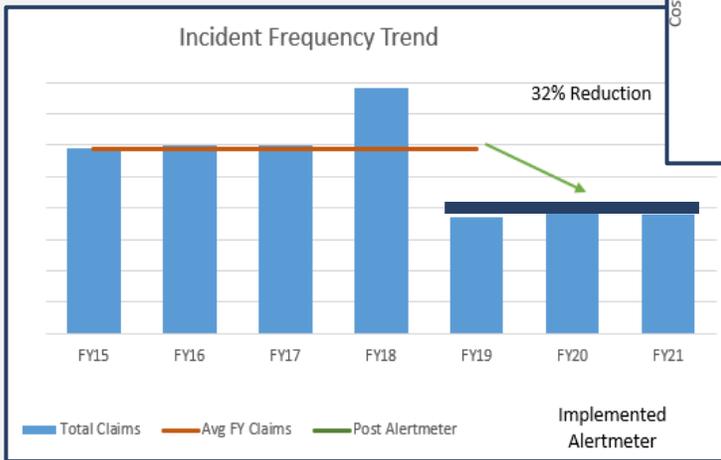
“AlertMeter®’s been great. The platform is really well aligned with our expectations and it allows us to have technology behind what our drivers are doing as well as compliance with DOT requirements.” -Gary Anglesey, Director of Operations, Savage Services

Savage Services made the decision to buy AlertMeter® after identifying fatigue as a major contributing factor behind their recent safety incidents. By utilizing AlertMeter®, they hoped to be able to identify when a driver wasn’t fit or alert enough for work. The Director of Operations at Savage Services explained their investment, "If we could identify one driver not on their game, then it would be 100% worth it."

Further, Savage Services utilized AlertMeter® to help them differentiate themselves from competitors and demonstrate their commitment to a higher standard of safety. Savage opted to use AlertMeter® on their existing truck-based tablets that were currently supporting their ELD/Telematics system. This eliminated the cost for additional equipment and allowed drivers to utilize a familiar device without disrupting routine.

After two years of using AlertMeter, Savage saw the following improvements:

- 32% Reduction in Incident Frequency
- 40% Reduction in Total Recordable Incidents
- 53% Sustained Reduction in Annualized Claims Costs



2. Triple S Steel: 40 distribution centers supplying steel to construction, mining, and oil industries, Houston, Texas.

“The interaction between our leadership team and our employees from a safety perspective has just gone through the roof. It has increased everyone’s safety awareness. Second, in states where marijuana has been legalized, the morale has really improved because there’s more assurance that everyone is fit for work.”- Tanner Hickman, VP of Safety, Triple S Steel

Results after 2 years of AlertMeter use:

- 30% reduction in Workers Compensation Insurance claims
- 50% reduction in Total Recordable Incident Rate (1.6 down to 0.8)
- 52% reduction in total average cost of incidents

3. Anglo American Mining, South Africa (24/7 Mining Operations utilizing AlertMeter with PRISM)

“Predictive Safety is a company with integrity and respect for diversity. They are a high-performance company and working with them has been great . . . I personally can recommend them for any project.” -Estelle van Aarde, Wellness Advisor, Anglo American Sishen Mine

Results after 2 years:

- 35% reduction in incident frequency
- 7% improvement in productivity
- 3% improvement in night-shift attendance
- Improved employee morale

4. VForge: Aluminum Forging Company, Lakewood, Colorado

“What we liked most about how AlertMeter® aligned with our philosophy of the workforce was that culturally it was a shift in how we respected the employee and their well-being, and the regard for their safety when they came to work. And that is a different message and tone than the options we had in drug testing. We’ve seen a way to hire more thoughtful employees and are benefitting from a productivity uptick that aligns with how long AlertMeter® has been a system for us.” - Jon Young, General Manager, VForge

Results after a 2-year study verified by Pinnacol Assurance (Worker’s Compensation Provider):

- 70% reduction in worker’s compensation claims
- 90% reduction in drug testing costs
- 35% reduction in employee turnover
- 11% improvement in productivity

User Feedback

Emotional Distress:

- "... scored outside their normal range and I went to speak to her. She said she'd been having family trouble, her mom was sick and her nephew was getting into a lot of trouble. She said she had been extremely stressed and couldn't think straight. We had her foreman keep an eye on her throughout the shift and put her on duty at the front gate checking people into the project."
- "... scored outside his normal range. When I talked to him, he said he had been stressed and trying to juggle 4 tasks at the same time. Taking the test was a good reminder for him to slow down and focus."
- "... scored abnormally on two consecutive tests, triggering a notification. I spoke to him and found out that his father had passed away the day before. The employee was reassigned to low-risk work for the day."

Fatigue:

- "... was on a 2-week night shift for a street work operation. Last night he scored outside his normal range of alertness at 3:00am. I called him on my way to work and he stated that he was exhausted/extremely fatigued. He was pulled from night-shift and tomorrow he will be back on days."
- "After ... scored abnormally on the AlertMeter® test, I saw that he was not behaving normally. We found out that he had been working for an extended period in extreme heat and had not been hydrating. We had him rest in an air-conditioned area and drink water. A short time later, he scored normally on the AlertMeter® test and went back to work."
- "After speaking with the employee, he said that he didn't get enough sleep last night and that he was in a car accident 3 days ago from which he wasn't fully recovered. The HR Director and I suggested that the employee leave to seek medical attention and contact his temporary employment agency for further instructions."

Workplace Culture:

- "AlertMeter® has brought a sense of empathy into the workplace. It has led to conversations that highlight topics that never would have been discussed, which helps employees buy into our company culture. We truly care about our employees and this program falls directly in line with those core company values."
- "Although some people were initially concerned about it being invasive, once they got on board and began to understand that it is a proactive safety measure and not punitive, it just became a part of their day. It is making an impact on how prepared people are to start each day."
- "Our employees began sharing their daily AlertMeter® performance results with workmates to prove that they were ready and able to work safely around each other."

Substances:

- "... scored outside his normal range on his pre-shift AlertMeter® test. In our conversation, I learned that the employee had been drinking heavily the night before and was suffering from a hangover. I referred them to HR."
- "When we announced that we would begin using AlertMeter®, ... came forward to admit having a substance abuse problem and chose to seek help for his addiction."
- "... scored abnormally on two consecutive tests and admitted to having inadequate sleep and to taking cold medications. I observed unusual and inconsistent behavior from the employee, who still could not score normally on a third attempt. I referred the employee to HR."
- "I responded to the ONR notification regarding ... upon speaking to ... I noticed unusual behavior. Sent the individual to HR for possible reasonable suspicion."