



Green Cross for Safety® Awards 2021 Finalist | Advocacy

James McGovern

As a safety expert, James McGovern understands that recordable injuries and high-level, near miss incidents are all too common. Companies in the manufacturing, industrial and general industries often struggle to manage these events in ways that keep their employees safe.

While working at a Texas-based petrochemical plant, a safety auditing team conducted a deep dive into the previous three year’s (2015-17) recordable injuries. Surprisingly, the independent investigators found that the injured worker was “not paying attention” or “not focused on the job being performed” in 75% of the total 25 recordable injury cases.

The injured employees, it seemed, were operating at a lower level of mental focus than required. If these cases could be eliminated by training workers to understand the levels of mental focus, McGovern thought, it would be a huge leap toward eliminating recordable incidents altogether.

Additionally, a heightened level of focus would further allow the employee to better evaluate the tasks they performed throughout the day and possibly further reduce the likelihood of future incidents occurring, including during more serious tasks.

Mental focus training led to a 75% drop in recordable injuries!

WHITE, YELLOW, ORANGE & RED TRAINING MODEL

Mental condition	Reaction	Time
White	Calm, somewhat observant, wide scope of view	
Yellow	Increased awareness, focused on surroundings, alert	8 to 10 hours
Orange	Very aware, very focused on one thing, narrow scope of view	30 to 45 minutes
Red	Extremely aware and focused, extremely narrow view	2 to 3 minutes

Mental focus training is commonly taught to police officers and military personnel involved in tactical operations. Understanding mental focus allows officers to be in the proper mental state during their shifts. As officers engage in tasks throughout the day, they can shift levels as needed to safely accomplish duties when responding to calls. These mental focus levels are identified by colors, with each color representing a wide to narrow level of focus.

This system has proven to be a strong foundational tool that allows officers to safely face threats and dangers in the performance of their duties. McGovern, who had taught the training at the Chicago Police and Fire Training Academy, decided to train the industrial workers at the petrochemical plant in the same system.

Like police offices, these employees work in dangerous situations, wear protective clothing and equipment and must be prepared for the unexpected. The tasks assigned to each range from the routine and mundane, like general upkeep and cleanup, to the dangerous, including line breaks, crane lift operations in tight units and non-destructive metal testing. These workers, McGovern determined, should be trained to operate in the proper mental state, to recognize hazards and to face all tasks in the best way possible.



The petrochemical company incorporated the new system into the employee onboarding and post-incident retraining processes at their Texas plant. All existing employees were trained in early 2018. The company made signs, helmet stickers and lanyard cards to help reinforce the importance of mental focus. Each worker was able to not only monitor themselves, but also engage with other workers, including mentoring new employees and conducting behavior-based audits. The system also worked to eliminate hazards and distractions, such as cellphones, which can take away a worker's ability to remain focused.

At the conclusion of 2018, the Texas plant had only two recordable injuries, a 75% decrease over the previous three years and the lowest in the history of the plant. The success of the system at their largest and flagship location was widely celebrated by the company and subsequently incorporated in other locations with high Total Recordable Incident Rates, with an overall goal of global application. Since the success of this system has been revealed, other companies and union groups - including Phillips 66, the Brock Group and the International Union of Operating Engineers (Local 150) - have incorporated it.

This system can be easily adopted by leaders in any industry or business to equip employees to work safer. The mental focus system should be taught to workers at all levels, as it reduces the amount of recordable injuries suffered each year and creates safer workplaces for all.

