

PIP SPEAK

THE NEWSLETTER OF
Partners in Performance

Safety and operations improvement go hand in hand

There is a perception that business improvement is not compatible with, or worse, can actually undermine, safety performance at a site. PIP experience disproves this: the evidence shows that the application of core improvement and management disciplines can rapidly improve sustainable safety results. The same fundamentals that are good for operations are also good for safety: clear accountabilities, compelling targets, widespread employee

participation, cascaded reviews closing the loop on actions, root cause problem-solving and regular compliance audits all apply to operations and safety alike. Furthermore, stable sites with controlled operations and low variability prove to be the safest sites.

Five improvement fundamentals applied to safety

Adoption and adherence to five improvement fundamentals can drive a dramatic turnaround in site safety performance.

1. Stretch targets that are widely understood and communicated

Like an operations improvement effort, success in safety starts with agreement on a quantitative target that is ambitious but achievable. Too often safety goals are well intentioned but vague. Aspirations like 'Zero Harm' and 'Safety First' must be translated into measurable input and output KPI targets by individuals to create focus and traction.

Once they are assigned our focus moves to 'disaggregating these targets into tangible actions that the individuals can deliver within the month – along with their actions on

their other priority KPIs for the month. This creates focus and velocity in the organisation as people have broken their goals down into tangible elements that they can deliver in a short period of time.

Example from PIP work: Client partners integrate safety stretch targets into their overall site goals. The results chart below was at a site where the team also delivered a 20% increase in tonnes, a 7% reduction in costs and a 17% reduction in procured spend.

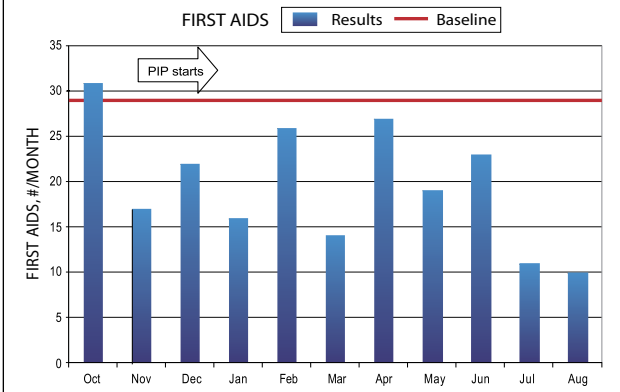
2. Site-wide involvement from the General Manager to operators

Any improvement effort is only sustainable when it involves everyone, at all levels of the organisation, adopting improvement disciplines as 'part of the way they do business' each day. Opportunities to engage employees from across the site – and demonstrate their collective impact – can be tipping points for affecting a positive change in safety culture.

Example from PIP work: At a FIFO mine, a site-wide Personal Protective Equipment (PPE) clean-up campaign was launched →



Safety: Safety KPI and initiatives are nearly always tackled in parallel



to remove obsolete PPE from circulation and recycle any excess reusable PPE that had accumulated around the site. Led by the safety dept with support from the improvement teams, the site's PPE drive resulted in the participation of over 80% of employees, identified and removed hundreds of out-of-date respirators and gas monitors and saved over \$250,000 in reusable PPE. Demonstrating that each individual could play a part in improving safety, the campaign was an important first step, amongst many, towards a culture of proactive safety involvement.

Similarly visible commitment by having ALL management carrying out behavioural safety observations on the operation on a regular basis demonstrates management commitment to the effort. These observations can then be cascaded down to the shopfloor.

3. Cascaded reviews that focus on KPIs and actions to impact them

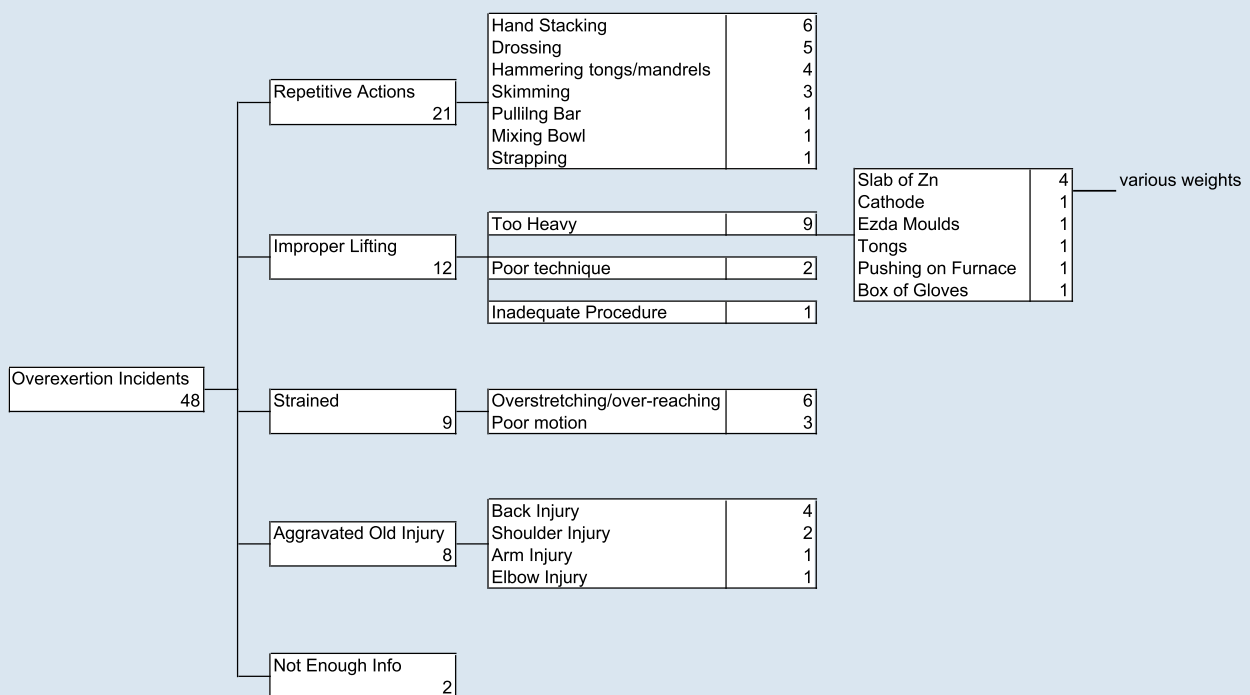
Typically, PIP improvement efforts look to cascade regular reviews of the KPIs and priorities that matter most throughout the organisation. These serve to focus everyone on the priorities and their individual actions to help achieve the targets for the month. These reviews provide a closed loop which helps to ensure that managers are walking the floor, carrying out observations, carrying out audits on procedures and getting feedback from people on how the operation is doing generally. These reviews integrate all the KPIs of the business so each level learns how to manage all elements of the business. This prevents the wild swings that can occur if a large one-KPI program (safety, costs, maintenance) is introduced by itself ... after 18 months of focus the other elements of the operation tend to fall over from lack of focus and the pendulum swings back again.

Example from PIP work: At an Australian nickel mine, regular Superintendent and Supervisor scorecard reviews have

3D. Dept Focus Groups - Accident Driver Trees

Each high incidence type of injury was analysed for basic and root causes.

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proven to be effective operations tool. At the start of every shift pattern, the Superintendent and Supervisor meet to agree on KPI targets and priorities for this period. Key safety deliverables to be achieved during the swing are an integral part of the scorecard. At the end of the shift pattern, they meet again to review performance versus the scorecard targets. In the 1st month of implementation, 87 of 100 reviews took place across the site – evidence that safety KPIs and the actions to impact them, were being cascaded throughout the organisation.

4. Root cause solutions to address the key drivers

Improvement efforts in operational areas bring a rigorous focus on the key drivers of productivity or downtime. Analysis identifies the top causes, root cause solutions are proposed, the highest impact ones are prioritised as improvement ideas. The same root cause approach that we apply to rigorously analyse the key drivers of throughput, costs or downtime are also effective when applied to safety where high incident injuries and accidents can be targeted and eliminated. What's more, improvement team emphasis on coaching safety personnel in root cause problem-solving helps embed the skills to ensure ongoing safety improvements.

Example from PIP work: At an Australian zinc smelter, a series of root cause improvement sessions helped to dramatically reduce the top causes of injuries. Led by safety personnel, supported by the improvement team and involving operators and tradesmen, these sessions generated ideas against root causes for injury (see the example above of a driver tree and the number of ideas generated on each branch).

5. Closing the loop with regular audits

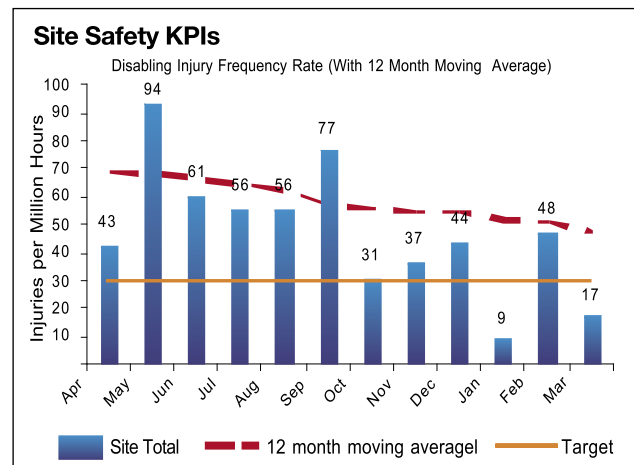
A core discipline – and part of the work improvement teams put in place – is a regular system of checks or audits to ensure that key procedures are followed and critical tasks are completed. The relevance to safety of 'closing the loop' is especially critical: regular auditing of the adherence to procedures and both the completion and effectiveness of actions can reduce injuries and save lives.

Example from PIP work: At a mine in the arctic, a process of ICAM audits has proven successful in reducing repeat incidents. One month after an ICAM is complete, two members of the employee OHSC follow up with an audit. They focus on getting first-hand evidence that all actions have been completed and are proving effective. The audits typically take a few hours and results are reported directly to the Safety Manager. The ICAM audits have been effective because they are a low-maintenance solution that reinforces individual accountability for safety by engaging employees directly in closing the loop.

Impact and results

As the chart below shows, the impact of improvement programs on safety can be rapid and significant. These results were delivered in parallel with a 12% increase in throughput, a 20% reduction in costs and a 30% reduction in environmental incidents.

By adopting core improvement fundamentals - including visible input and output KPI targets, widespread employee involvement, cascaded action reviews, root cause problem-solving and regular audits to close the loop - sites can turn their passion for improved safety performance into reality.



Partners in Performance

Partners in Performance is a firm that builds better businesses. We deliver rapid performance improvements in industrial, resource, manufacturing and service companies, using specialist teams and a hands-on approach to lower costs and increase revenues.

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