Zero Accident Techniques Efficiency Notes - Project Controls Series



What It Is

Zero accident techniques can be defined as the techniques that are used to create a work environment that operates with the mindset that all accidents can be prevented. This can be achieved through the use of site-specific training programs, and the implementation, auditing, and incentive efforts that promote the goal of having zero accidents on the jobsite

Why You Need It

Implementing zero accident techniques in the workplace not only ensures the safety of the workers but it also can lead to reduced cost and schedule, lead to a positive culture on the work site, and lead to better relationship between workers and management.

Factors that Influence safety performance

Some of the factors that influence safety performance on short duration projects are:





Transferring workers form other projects to perform the work

Hiring workers a few weeks before the short duration project



Shorter work weeks and project duration



Smaller crews or worker-supervisor ratios



Incentivized contracts

Owners role in Construction Safety

In order for a company to achieve the goal of zero accidents on a particular jobsite, the owner must be committed to be actively involved in safety management. Research has shown that improved safety performance is a direct result of the owner committing to the following practices:

- ✓ Careful selections of safe contractors
- ✓ Contractual safety requirements
- \checkmark Proactive involvement in the safety practices of projects.
- \checkmark Establishment of and funding for a safety recognition program
- ✓ Active participation in safety training and orientation and verifying the comprehension of the training.
- ✓ Assigning a full-time safety representative on site.





Making Zero Accidents a Reality

Through years of research on both construction safety and zero accident techniques, CII has identified 10 key topic areas displayed bellow:

1. Management Commitment

Upper level managers must demonstrate their commitment to the safety of there workers in order to promote project safety within the work place.

2. Staffing for safety

Many of the large projects in operation will have full-time safety representatives on their job sites. Research has shown that greater attention was paid to safety issues when the safety representative was hired as an employee of the general contractor instead of a hired consultant.

3. Pre-project and pre-task planning

Pre-project and pre-task planning is when meetings are conducted that involve a job hazard analysis as well as contractibility reviews, both of which involve safety on the job site. In order to ensure that safety programs are relevant to the job site, site-specific safety programs should be implemented.

4. Safety education (orientation and specialization training)

Training has been proven to be one of the most effective means for educating a worker about how to perform tasks safely.

5. Worker Involvement

Studies have shown that behavior based safety programs as well as safety perception surveys are both effective tools that should be utilized in order to reinforce good safety practices and correct unsafe behavior.

6. Evaluation and recognition and reward

Safety incentives should be used frequently to help encourage safety performance amongst the workers in a project.

7. Subcontractor Management

A key component to any construction process is the use of subcontractors that will employ many of the workers on the site. It is essential for subcontractors to be included to the safety performance at the project level.

8. Accident/incident investigation

Conducting accident investigations contributes to improving safety performance because it allows managers to learn from there previous mistakes and prevents future recurrences.

9. Drug and alcohol testing

The consequences of substance abuse and the impact that it will have on safety performance are well known amongst companies which is why it is a common practice for large organizations to have substance abuse testing.

10. Contract Type

Research has shown that projects that are bound by a cost plus contract have greater safety performance than projects that are bound by lump sum contacts.