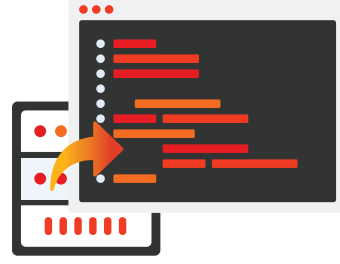


# Tackling Insurance Premiums With Predictive-Based Safety

Insurers are seeing companies use predictive-based safety to sharply reduce recordable incident rates, which enables them to provide lower rates to those companies.

## What is Predictive-Based Safety (PBS)?

A safety methodology that uses data to change behaviors by collecting a wide array of project and observational safety data for analysis by AI and / or advanced analytics.

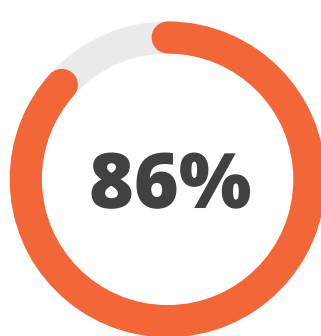


The analysis enables organizations to predict which sites are at highest risk for a recordable incident over the next week so they can take action to prevent accidents before they occur.

### What Has Caught Insurers' Eyes?



Adopters of a PBS have seen:



impressive prediction accuracy rate



corresponding reductions in the occurrence of recordable incidents

## What are the 3 elements of a PBS program?

### Data Collection

The predictive models that enable PBS require data from several sources. This is data you may already be collecting, including safety observations, safety incidents and other project data.



#### Safety Observations

- Record positive behaviors
- Identify job site hazards



#### Safety Incidents

- Near misses/hits
- Property damage
- All Injuries and recordables



#### Other Project Data

The more data an AI has to work with, the more accurate the results. Even data such as staffing levels and weather information can yield surprising insights.

### Data Transparency

Many organizations are not used to full data transparency so it's critical to manage expectations.



If management reacts poorly to the data or the results, people will be hesitant to report hazards or incidents, which will spoil the data and make PBS ineffective.

### Prediction Deployment

The outputs that come from a predictive model take two forms:



Organizations have to act on these insights to produce results. Establish a process for taking action to prevent incidents before they occur.

## What Are the Insurance Implications of PBS?



### Traditional Premium Determination

Others similar to you:

- |               |    |  |
|---------------|----|--|
| NCCI          | +  | • Previous Losses                      |
| Standard Rate | or | • Experience Modification Rating (EMR) |
|               | -  | • Safety Practices                     |

### Future possibilities with PBS

#### Personalized premiums:

Data and AI applied to an individual contractor enable customizable policies with rates



### Assessing actual risk versus past risk may allow insurers to:

- Provide lower rates
- Allow insurers to better predict future results in their underwriting
- Provide more personalized customer service
- Streamline claims processes

*"A better run business is going to result in fewer losses and there should be rewards for that - through underwriting, through terms and conditions, and the opportunities to purchase insurance..."*

— Bret Bush, The Hartford, Risk Engineering Strategy and Execution Lead, IoT Innovation Lab