

Why do we perform observation reports?



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Can workplace injuries really be predicted?



Our Model Four (4) SafetyNet "Truths"



Organizations that incorporated the
4 Safety Truths
 in their Goals had **2 to 3**
times less incidents...

- Research by Carnegie Mellon and Predictive Solutions
- Developed Predictive Model Using
 - 112+ Million Observations and associated incidents
 - Over 15,000 Individual Sites
- Found four (4) truths about **safety** that drive Model



Four (4) Safety "Truths"



Four Safety Truths that act as leading indicators of future safety incident risk:

1

Inspection Levels

as inspections and observations increase, incidents fall

2

Inspector Levels

as the number and diversity of inspectors increase, incidents fall

3

Safe Observations

as 100% safe inspections increase, so do incident levels

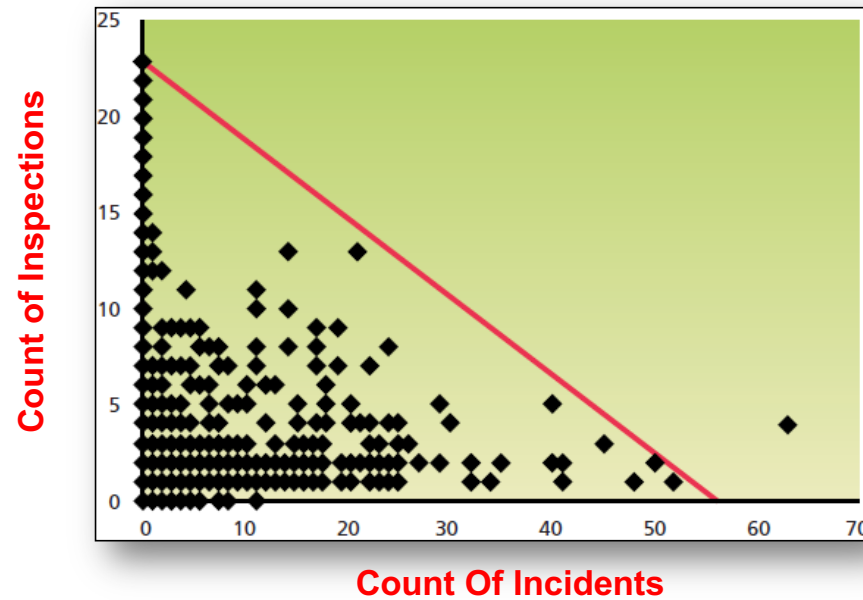
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Safe Observations

as larger numbers of unsafe observations are recorded and are not fixed quickly, incidents increase

4 SafetyNet "Truths" – Truth #1

More **Inspections** = Safer Organizations

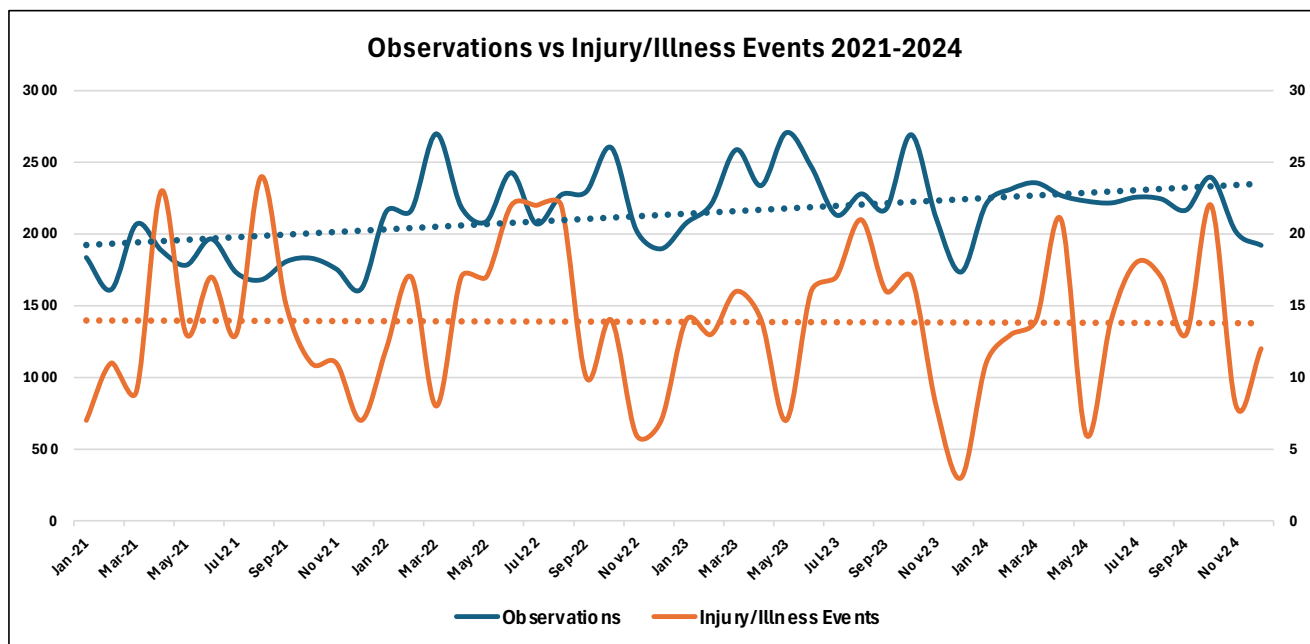


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4 SafetyNet "Truths" – Truth #1



More **Observation Reports** = Safer Worksites

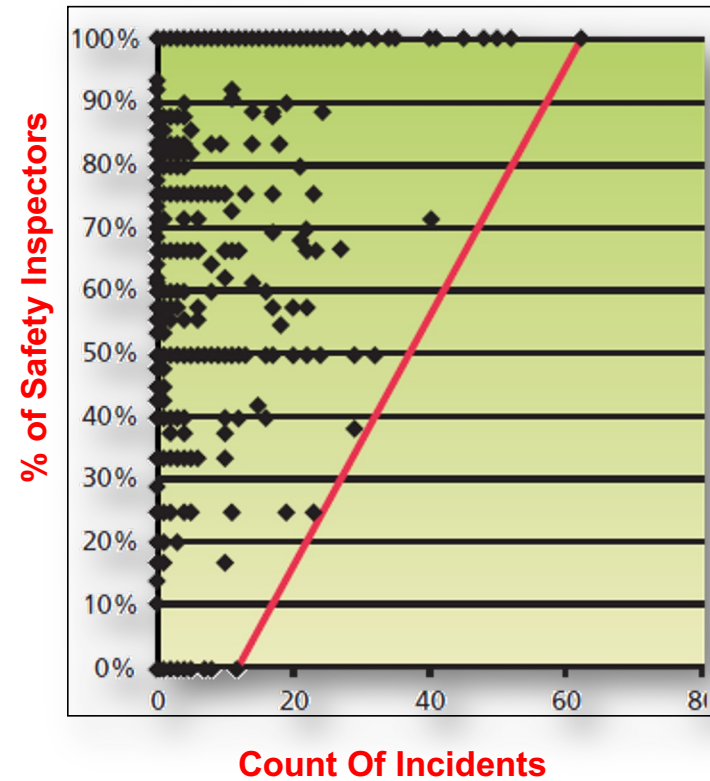


- For the past 4 years observations have consistently remained above 1,500 and show an increasing trend overall.
- Injury/Illness events fluctuate greatly, but overtime are trending downward.
- Periods with higher observation counts tend to correlate with lower Injury/Illness events.



4 SafetyNet "Truths" – Truth #2

Diverse **Inspectors** = Safer Organization

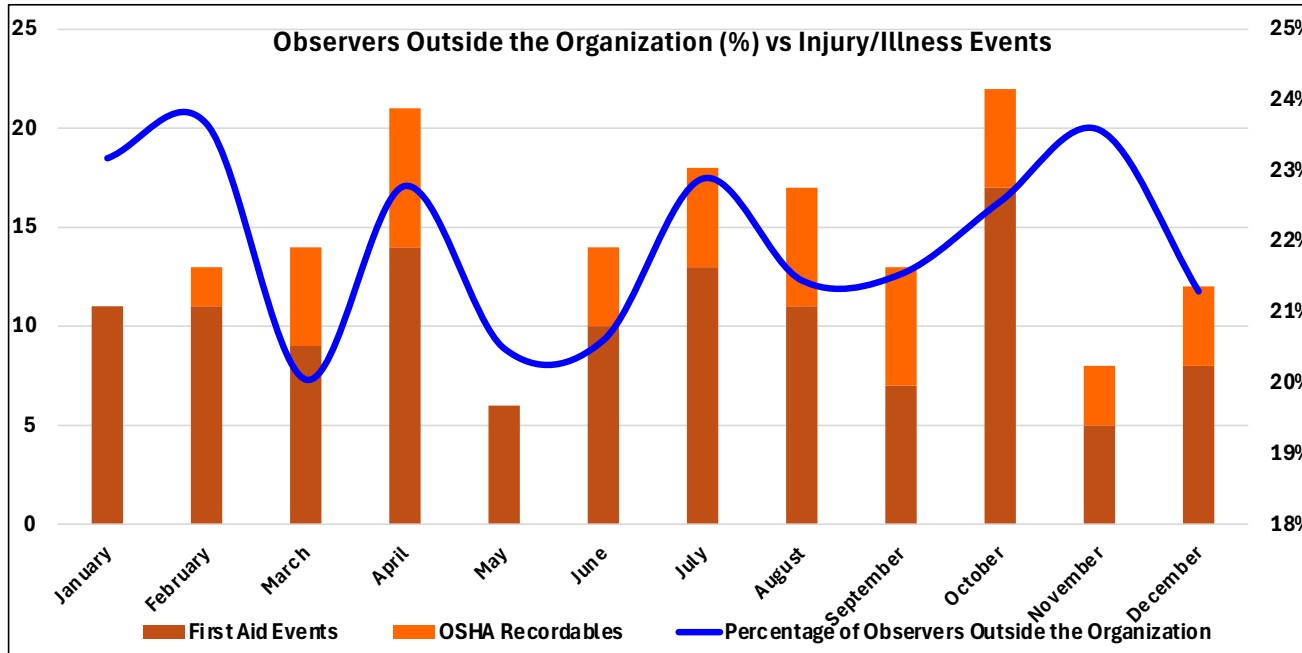


4 SafetyNet "Truths" – Truth #2



More **Observers** = Safer Worksites

Specifically, more observers outside the safety function, predict a safer worksite.

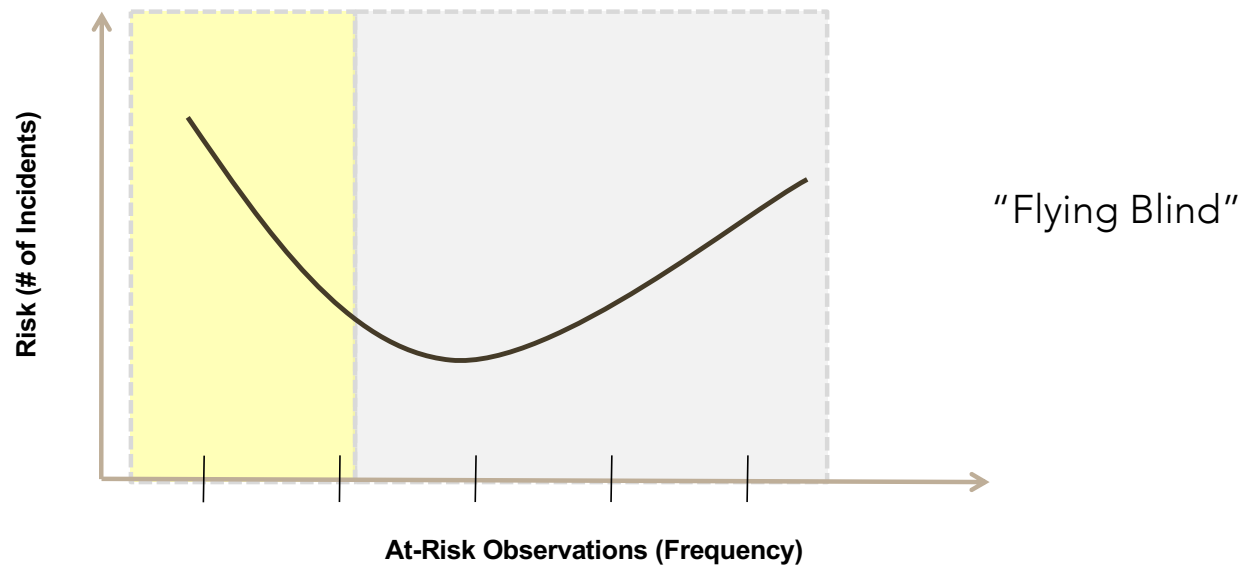


While external observers contribute to a safer worksite, the relationship isn't always consistent. For instance, May (20% external observers) had the lowest injuries (6), and November (24%) had only 8. However, February (24%) and October (23%) saw high injuries (13 and 22), as did July and August (21%-23%). This suggests other factors also influence safety outcomes.



4 SafetyNet "Truths" – Truth #3

Too Many "100% Safe" Inspections =
More At-Risk Organization

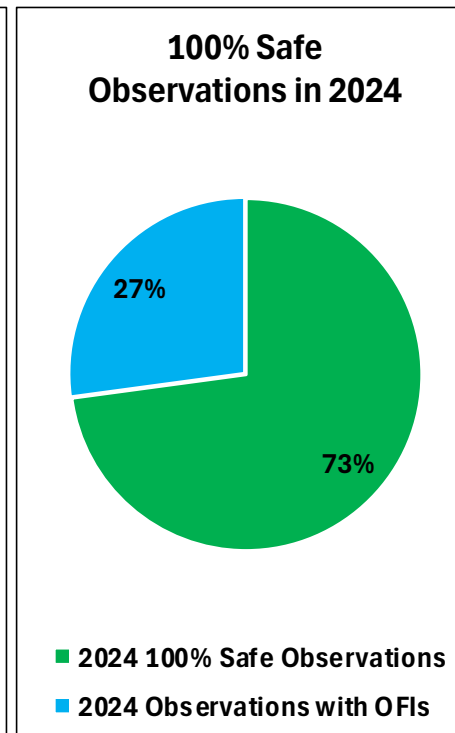
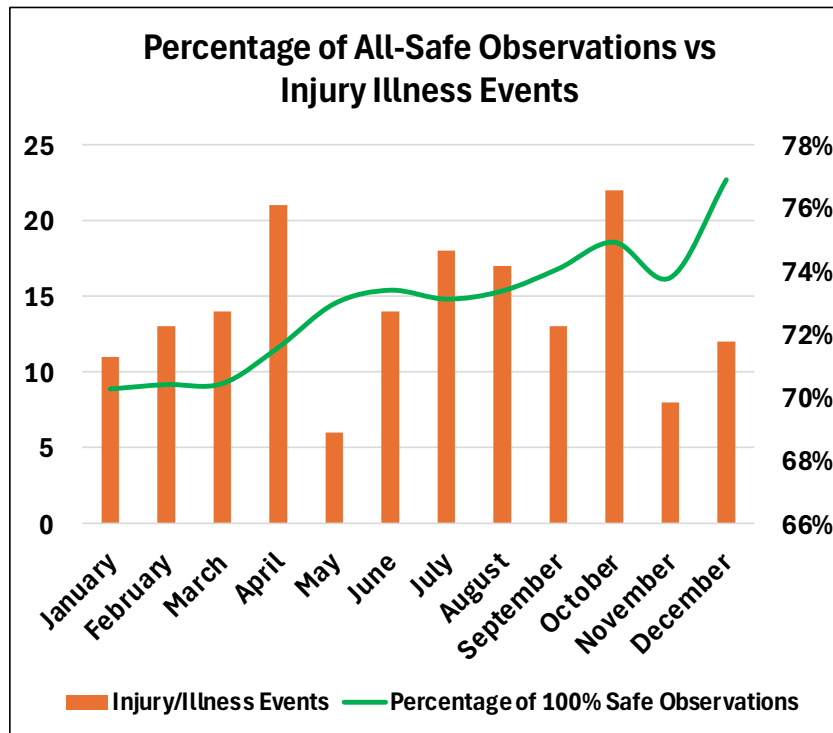


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4 SafetyNet "Truths" – Truth #3



Too Many "100% Safe" Inspections = Unsafe Worksite

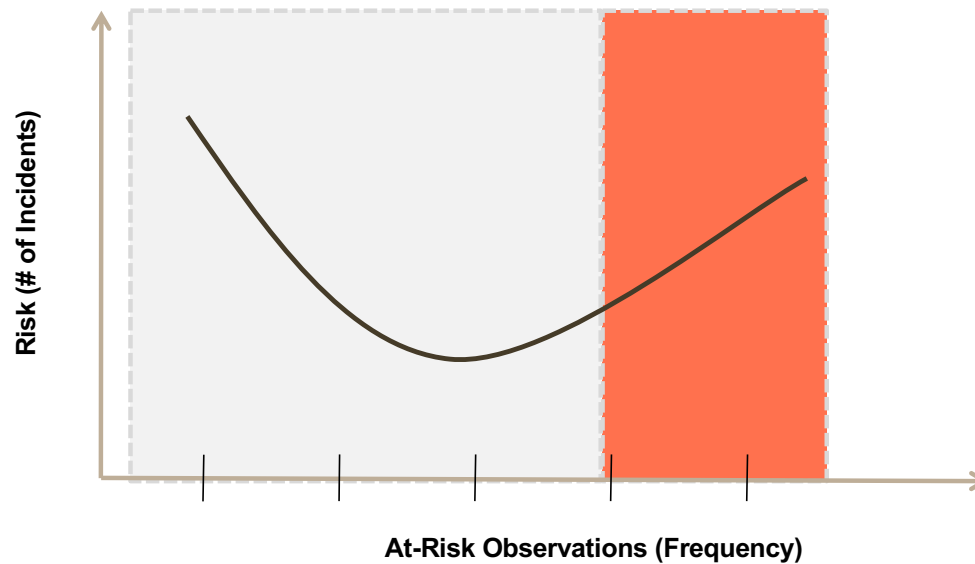


Higher percentages of "100% safe" observations coincide with increased injuries.



4 SafetyNet "Truths" – Truth #4

Too Many **"Unsafe" Observations** = More At-Risk Organization

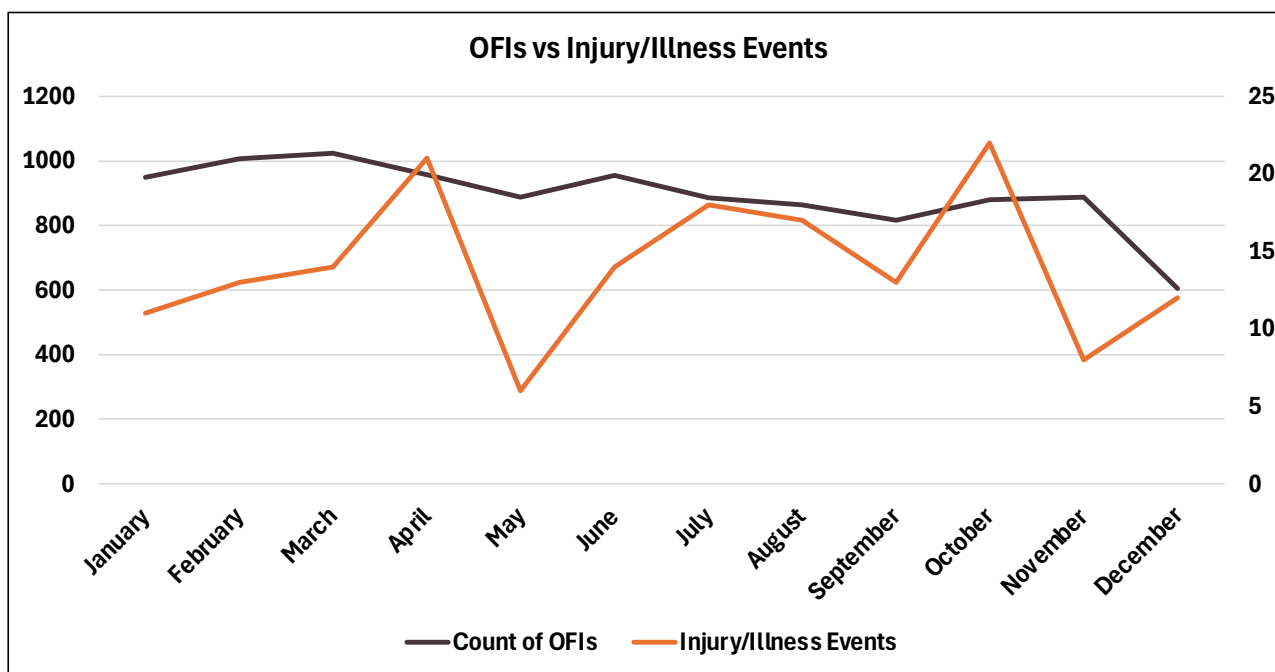


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4 SafetyNet "Truths" – Truth #4



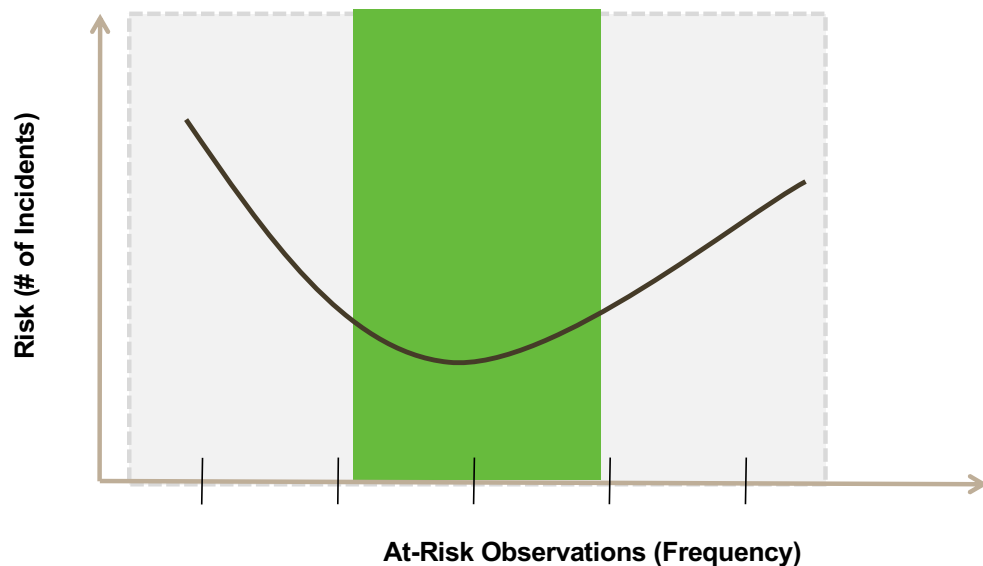
Too Many **"Unsafe" Observations** = Unsafe Worksite



Months like March, April, and October show increased Injury/Illness events, which implies that these unsafe conditions were not addressed before they escalated to injuries.



The Ideal Position



Promote:

- High level / Quality Inspections
- Increase number of inspectors
- Continually find, document, and address unsafe conditions