Helping Businesses Make OSH Risk Decisions

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☆ Johns Hopkins Graduate
☆ ASSP Course Designer and Instructor

Safety Through Accountability and Recognition!
Agenda / Objectives

- Prepare the information management needs for risk prioritization
- Measure continual improvement of your “Risk Assessment Process”
- Gain management’s trust in the safety professional’s Prioritization
## Agenda and Objectives

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Management’s Business Role

Businesses are in business to Take Risks!
5 Myths of Risk Decision Making

1. Goals of “0” incidents and “Acceptable Risk” can co-exist
2. “Normalization of Risk” does not occur here
3. Severity and Likelihood are equal
4. Admin and PPE work as well as Engineering and other higher-level Treatments
5. Risk Reductions always achieve acceptable risk
Risk Calculations!

- Severity
  - Occurrence
  - Event
- Likelihood
  - Frequency
  - Duration
  - Population
- Hierarchy of Risk
  Treatment (Control)

Includes treatments and controls in the calculation!
Risk Prioritization

<table>
<thead>
<tr>
<th>Likelihood/Probability of Occurrence or Exposure</th>
<th>Frequent (F)</th>
<th>Probable (P)</th>
<th>Occasional (O)</th>
<th>Remote (R)</th>
<th>Improbable (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity of Injury or Illness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catastrophic (CAT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical (C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marginal (M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negligible (N)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Occurrence or Exposure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>20</td>
<td>15</td>
<td>12</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Operation not permissible</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious</td>
<td>10</td>
<td>8</td>
<td>9</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>High Priority Remedial Action</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Take Remedial action at appropriate time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Risk Acceptable, Remedial action discretionary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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Vetted Definitions. Options. With ROI/CBA
Risk Decision Making Quiz

True or False

☆ All activities can be at acceptable risk levels.
  ☆ False, unless you artificially take greater credit for low level hierarchy of Risk Treatment

☆ Severity is of greater impact that likelihood.
  ☆ True. Although equal partners, Severity impacts businesses more than frequency

☆ Admin and PPE controls can reduce severity
  ☆ False. Neither reduces the energy or the incident/event itself.

☆ Management Wants Options
  ☆ False. Management Wants Data
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Risk Assessments

ASSP TR-31010-2020

Process, Process, Process
Risk Management

- Collaboration and Engagement of Stakeholders
- **Assign, Monitor, Review and Improve**
- Integrated Decision Making
  - Pre
  - Active
  - Post

Audit (Gap Analysis) the process
-ISO 19011
Terminology

- Uncertainty
- Opportunities and Threats
- Key Risk Performance Measures
- Roles, Responsibilities and Accountabilities
  - Risk Owner (accountability and authority)
  - Risk Leaders/Champions (implementation)
- Critical Success Factors
  - Go wrong, needs to go right?
- Control Detectability and Improvement

Use Standard Business Terminology
Metrics

🌟 Measure the Right People on the Right Things
Measure What Matters

What gets measured, gets managed.

PETER DRUCKER
American management guru (1909-2005)

What gets celebrated gets done well!
“Balanced” Set of Metrics
< ANSI Z 16

What hazard / risk is most significant, control least effective?

What Management System Element will most greatly contribute to Risk Reduction?
“Set” of Process (Logic) Metrics:

- Hearing Loss STS
- Pop over-exposed
- Input (Leading)
- New Controls Conformance Rate
- Output (Leading)
- Risk Assessments (Leading)
- Activity (Lagging)
- Outcome (Lagging)
- "Set" of Leading Metrics better influences and predicts ‘Outcomes’
- Risk Impact
- Lagging
- Leading
- HCP $ Impact (Lagging)
Key Performance Indicators (KPIs)

☆ Plan to timeline (report)
  ☆ Corrective Actions (new and better controls)
  ☆ Every Department has continual improvement objective!
  ☆ Higher level controls get more points!

☆ Are controls being followed
  ☆ Conformance rates (From inspections and Observations)
  ☆ Trends of non-conformances

☆ Lessons Learned
  ☆ What went well?
  ☆ Done differently?

Measure the right part of the organization on the right things
Measuring the Right Things

1. Are Process metrics and Logic metrics the same thing?
   - TRUE

2. Are more leading metrics better than just a few?
   - TRUE

3. Which is more important, measuring inputs, activities or outputs?
   - DEPENDS

4. Risk reduction is best measured by the fewer # of accidents?
   - FALSE, although this is a lagging metric
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Prioritization

★ Each Department, Know their top three risks
  ★ Loss analysis
  ★ Risk assessment
  ★ Data such as conformance rate and non-conforming trends

★ Each Department explore new and better controls (Hierarchy)
★ Track all the metrics
★ Publish and Celebrate (worker recognition)!
★ Make part of OHS Performance Appraisal for Mgmt.
Business Decisions

1. Business OSH decisions made to meet regulations and risks can achieve “0” accidents?
   False

2. Businesses make decisions based on feelings vs data?
   False

The more Leading Data and Metrics you have, the more management will trust that OSH can influence results.
References

★ American Society of Safety Professionals (ASSP)
  ★ The Safety Professionals Handbook
★ ASSP TR 31010-2020: Risk Management
• Prepare the information management needs for risk prioritization
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