THE ICS SAFETY OFFICER, PROACTIVE INCIDENT PREVENTION, AND CONTINUAL IMPROVEMENT IN SAFETY DURING CONTINGENCY OPERATIONS

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Overview

* Infrastructure

* Hazard Analysis

* Hazard Control

* Communication

* Leading Indicators

* Lagging Indicators

* Investigations

* Continual Improvement

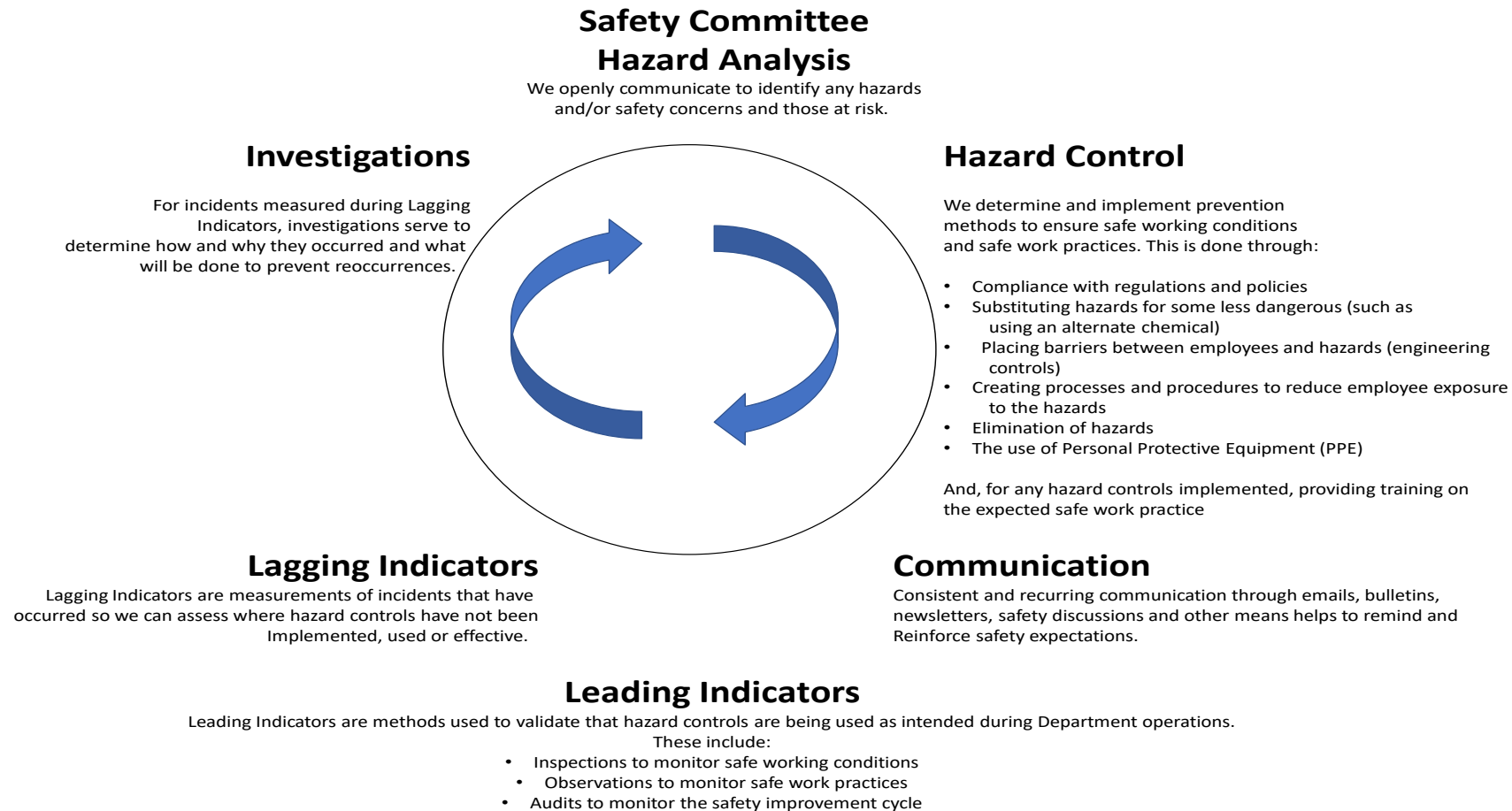# Infrastructure

Safety Committee

Command Staff
- ICS
- NIMS
- Unified Command

- Metrics
  - Representation
  - Qualifications

Improvement Cycle
Initial hazard analysis to extended response

Safety Committee
Hazard Analysis
We openly communicate to identify any hazards and/or safety concerns and those at risk.

Investigations

For incidents measured during Lagging Indicators, investigations serve to determine how and why they occurred and what will be done to prevent reoccurrences.

Hazard Control

We determine and implement prevention methods to ensure safe working conditions and safe work practices. This is done through:

- Compliance with regulations and policies
- Substituting hazards for some less dangerous (such as using an alternate chemical)
- Placing barriers between employees and hazards (engineering controls)
- Creating processes and procedures to reduce employee exposure to the hazards
- Elimination of hazards
- The use of Personal Protective Equipment (PPE)

And, for any hazard controls implemented, providing training on the expected safe work practice

Lagging Indicators
Lagging Indicators are measurements of incidents that have occurred so we can assess where hazard controls have not been Implemented, used or effective.

Communication
Consistent and recurring communication through emails, bulletins, newsletters, safety discussions and other means helps to remind and Reinforce safety expectations.

Leading Indicators
Leading Indicators are methods used to validate that hazard controls are being used as intended during Department operations.
These include:
- Inspections to monitor safe working conditions
- Observations to monitor safe work practices
- Audits to monitor the safety improvement cycle

Hazard Analysis

	Hazard Analysis – HHD						
Classification	Blood or Bodily Fluid Exposures (skin contact)	Needlestick /Sharps Injury (possible BBP exposure)	Motor Vehicle Accident	Chemical	Electrical	Ergonomics	Mechanical (i.e. – machinery, moving parts)
ACCOUNTANT ASSOCIATE							
ACCOUNTANT MANAGER							
ADMINISTRATIVE ASSISTANT							
ADMINISTRATIVE ASSOCIATE							
ADMINISTRATIVE COORDINATOR							
ADMINISTRATIVE COORDINATOR (EXECUTIVE LE							
ADMINISTRATIVE SPECIALIST							
ADMINISTRATIVE SUPERVISOR							
ASSISTANT CUSTOMER SERVICE MANAGER							
ASSISTANT DIRECTOR (EXECUTIVE LEVEL)							
BREASTFEEDING PEER COUNSELOR							
BUREAU CHIEF,DDS							
BUREAU CHIEF,PUBLIC HEALTH							
BUREAU CHIEF,PUBLIC HEALTH (EXECUTIVE LE							
BUYER							
CENTER ADMINISTRATOR							
CHEMIST I							
CHEMIST II							
CHEMIST III							
CHEMIST IV							
CHIEF NURSE,RN							
CHIEF PHYSICIAN,MD							
CHIEF SANITARIAN							
CLINIC ASSISTANT							
COMMUNICATIONS SPECIALIST							
COMMUNICATIONS TECHNICIAN							
COMMUNICATIONS TECHNICIAN SUPERVISOR							
COMMUNITY INVOLVEMENT COORDINATOR							
COMMUNITY LIAISON							
COMMUNITY RELATIONS SPECIALIST							
CONTRACT ADMINISTRATOR							

Hazard Analysis Progress Report

What hazards exist and who's at risk for them?

Any new hazards (physical, electrical, CBRNE, weather, or other?)

Any changes to existing hazards? (ex. – new chemicals)

Metrics
- Has the Hazard Analysis/Safety Plan been completed/reviewed?
- Any new hazards?
- Any changes?

Hazard Controls

	Applicable Regulations, Policies and Other Guidance	Can the hazard be eliminated?	Can the hazard be substituted for something else (i.e. - a less dangerous chemical, etc.)	Can we put a barrier between the employee and the hazard?	Can we change the process so the employee is not exposed to the hazard so long?	Can we use Personal Protective Equipment to cover up?	Who needs training on the safest possible work practices?
Blood and Bodily Fluid Exposures	29 CFR 1910.132	x	x	Equipment (containers, etc.)	Decontamination / Donning/Doffing Procedures	Yes (PPE Matrix)	All At-Risk Employees
Chemical	29 CFR 1910.132 / 29 CFR 1910.120 / Texas HAZCOM Act specific chemical regulations as applicable (i.e. - Formaldehyde / Safety Data Sheets	x	Depends on the chemical and its function	Equipment / Facilities	Decontamination / Donning/Doffing Procedures	x	All At-Risk Employees
Electrical	29 CFR 1910.301 / NFPA 70E	x	x	Equipment	Lock Out Tag Out	Electrical Safety PPE / Arc Flash PPE	All At-Risk Employees
Ergonomics	General Duty Clause (OSH Act)	x	Ergonomic / Adjustable Equipment	Ergonomic / Adjustable Equipment	Ergonomic / Adjustable Equipment	x	All At-Risk Employees

Hazard Control Progress Report

What hazard controls are needed for each hazard in the analysis?

- ◦ Regulations, Policies, Hierarchy of Controls & Training/Coaching

Metrics

- ◦ Any new or needed hazard controls? (ex. – PPE/respirator needed for a special hazard such as a chemical)
- ◦ Any changes or needs regarding existing hazard controls? (ex. – PPE is implemented but doesn't fit correctly)
- ◦ Training/preparedness completion status? (ex. – respirator fit testing)

Communication

- Safety Messaging plan

- Aligned with the Hazard Analysis / Safety Plan

- Communication is not a substitution for hazard control

Leading Indicators

Leading Indicators – used to validate that the hazard controls are being used in work process/in real-time

- Conditions – inspections
- Work Practices – observations
- Near-Miss Events – 'good catches'
- Surveys – team perception of the safety culture
- Recognition/Awards Programs – positive reinforcement of safe work practices, safe conditions and safety leadership

Leading Indicator Progress Report

Metrics

◦ Inspections, Observations, Audit
  ◦ Participation/Engagement - % completed (# completed/# goal)
  ◦ Findings - % safe (# safe / # total inspected, observed)
                                    + qualitative findings (ex. – 'wet floor,' 'team member
                                     not using required PPE' (resolved issues)

◦ Near-Miss Reports
  ◦ Participation/Engagement - # received
  ◦ Findings – qualitative (resolved issues)

◦ Perception Surveys
  ◦ Participation/Engagement - % completed (# returned/# goal)
  ◦ Findings – Survey results

◦ Recognition Programs
  ◦ Great for positive reinforcement to continue building participation and safety culture

Lagging Indicators

Lagging Indicators – measurements of incidents that have already happened

- Incidents – log of events, ICS forms
- DART Incidents (Days Away, Restricted & Transitional Duty)
- Paid Costs (actual direct costs paid (such as medical care, diagnostics, prescriptions, etc.)
- Incurred Costs (total dollars set aside to pay for the claims)
- Indirect Costs – costs such as backfilling positions of team members unable to work - not calculable but generally approximated at 4-6x the Paid Costs

Incident Analysis

An investigation is necessary for each incident to determine causal factors and preventative measures.

Metrics
- ◦ Participation/Engagement - % completed (# completed/# incidents) - quantitative
- ◦ Findings – qualitative (ex. – 'SOP not written for process in question,' 'Team member not trained to perform process in question,' 'Team member not using PPE during process in question,' etc.)

Reliability, Validity & Engagement

Reliability – the safety culture is increasing safe work practices and safe work conditions to prevent incidents; if we continue following the Safety Plan, we will continue safely operating.

Validity – the leading indicators validate the lagging indicators; we know that the Safety Plan is legitimately preventing incidents.

Engagement – the team is involved and participates in each component of the culture and there are positive reinforcements at each step .
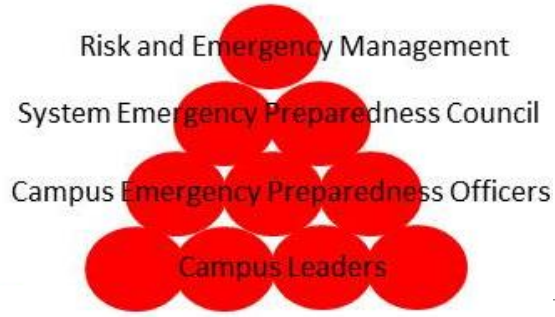
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Thank you for inviting me!