

The Value of an Effective Safety Gap Analysis

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Presented By:

EnSafe Inc.

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The logo for ENSAFE, featuring the word "ENSAFE" in a bold, white, sans-serif font. A white swoosh underline is positioned beneath the letters "A" and "F". The logo is set against a background of a utility worker in a bucket working on a power line.A photograph of two utility workers in white hard hats and safety gear working on a power line. They are positioned in white buckets attached to a crane. The background is a clear blue sky. The workers are focused on their task, with one worker appearing to be adjusting or connecting a component on the line.

engineering | environmental | health & safety | technology

PRESENTATION SECTIONS

DISCUSS KEY POINTS FOR

- 01 Current Trends
- 02 Why Focus on Worker Safety?
- 03 Elements of a Mature Safety Program
- 04 Conducting a Safety Gap Analysis
- 05 Tips and Tools for Success

Poll - What is your organizational worker safety culture?



We don't focus on compliance. We have no drivers at this time.

I'm compliant in several programs but not in others.

We have a culture of compliance and are confident that we are compliant.

I'm compliant and we typically adhere to industry consensus standards.

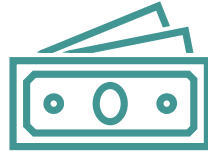
I'm compliant, adhere to industry consensus standards, AND participate in organizations that drive improvements.

UNIQUE BUSINESS CHALLENGES

Provide superior customer service



Work in constrained budgets



Respond to emergencies



Preserve company reputation



Electric utilities have many daily responsibilities...



Comply with stringent FERC regulations



Response to environmental advocacy claims

UNIQUE EMPLOYEE CHALLENGES

Resolve employee issues/disputes



Evaluate performance, coach/
give feedback



Evolving utility but employees resistant to change



Electric utilities have many daily responsibilities...



Workers
"leaving" earlier
than expected



Less "ready to
work" hires



Increased training
for skills and
knowledge



More issues with drug
and alcohol abuse

UNIQUE WORKER SAFETY CHALLENGES

Top 20 most
dangerous job



Electric utilities have many daily responsibilities...



High demand for
worker safety
programs

UNIQUE CHALLENGES = OVERWHELMING

Resolve employee issues/disputes



Provide superior customer service



Work in constrained budgets



Respond to emergencies



Preserve company reputation



Evaluate performance, coach/give feedback



Evolving utility but employees resistant to change



Top 20 most dangerous job



Utilities have many daily responsibilities...

Workers "leaving" earlier than expected



Comply with stringent FERC regulations



Less "ready to work" hires



Response to environmental advocacy claims



Increased training for skills and knowledge



More issues with drug and alcohol abuse



High demand for worker safety programs



And you must manage the unique work tasks, with these variables, challenges, and remain in compliance with over 30 safety regulatory programs.

>30 Applicable OSHA Standards

General Industry

- Walking and Working Surfaces
- Confined Space Entry
- Enclosed Space Entry
- Low Voltage Electrical Safety
- Respiratory Protection
- Forklift Safety
- First Aid and CPR Training
- Bloodborne Pathogens
- Materials Handling and Storage
- Warehouse Safety
- Emergency Response
- Building Emergency Action Plan
- Incident Reporting & Investigation

Construction

- Trenching and Excavation
- Heavy Equipment Safety
- Rigging and Signaling
- Crane Operations
- Load Securement
- Hand/Power Tools
- Traffic Control

Both

- Electric Generation, Transmission, and Distribution
- Hazard Communication
- Personal Protective Equipment (PPE)
- Hearing Conservation
- Workplace Violence Prevention
- Aerial Devices
- Derrick Operation
- Fall Protection
- Ergonomics
- Vehicle Safety
- Lockout/Tagout
- Heat Stress

Poll - What is your organizational worker safety culture?

1
Operational
Focused

We don't focus
on compliance.
We have no
drivers at this
time.

2
Conditionally
Compliant

I'm compliant
in several
programs but
not in others.

3
Fully
Compliant

We have a
culture of
compliance and
are confident
that we are
compliant.

4
Industry
Standard

I'm compliant
and we typically
adhere to
industry
consensus
standards.

5
Champion

I'm compliant,
adhere to industry
consensus
standards,
AND participate in
organizations that
drive improvements.

But I'm a public entity...

OSHA doesn't regulate my utility...

We never have inspections for worker safety...

I won't get monetary fines anyway...

Typical Responses from Public Utilities

...Do I really need to worry about all of this?

Some or all of this may be true, but there are reasons for complying with minimum safety standards.

Why Focus on Worker Safety?

COST



- Workers' compensation premiums
- Direct and indirect injury and equipment costs
- Lawsuits, fines, and/or penalties

WORKFORCE ATTRACTION AND RETENTION



- Employee-market
- Resistant to work for unsafe employers

REPUTATION



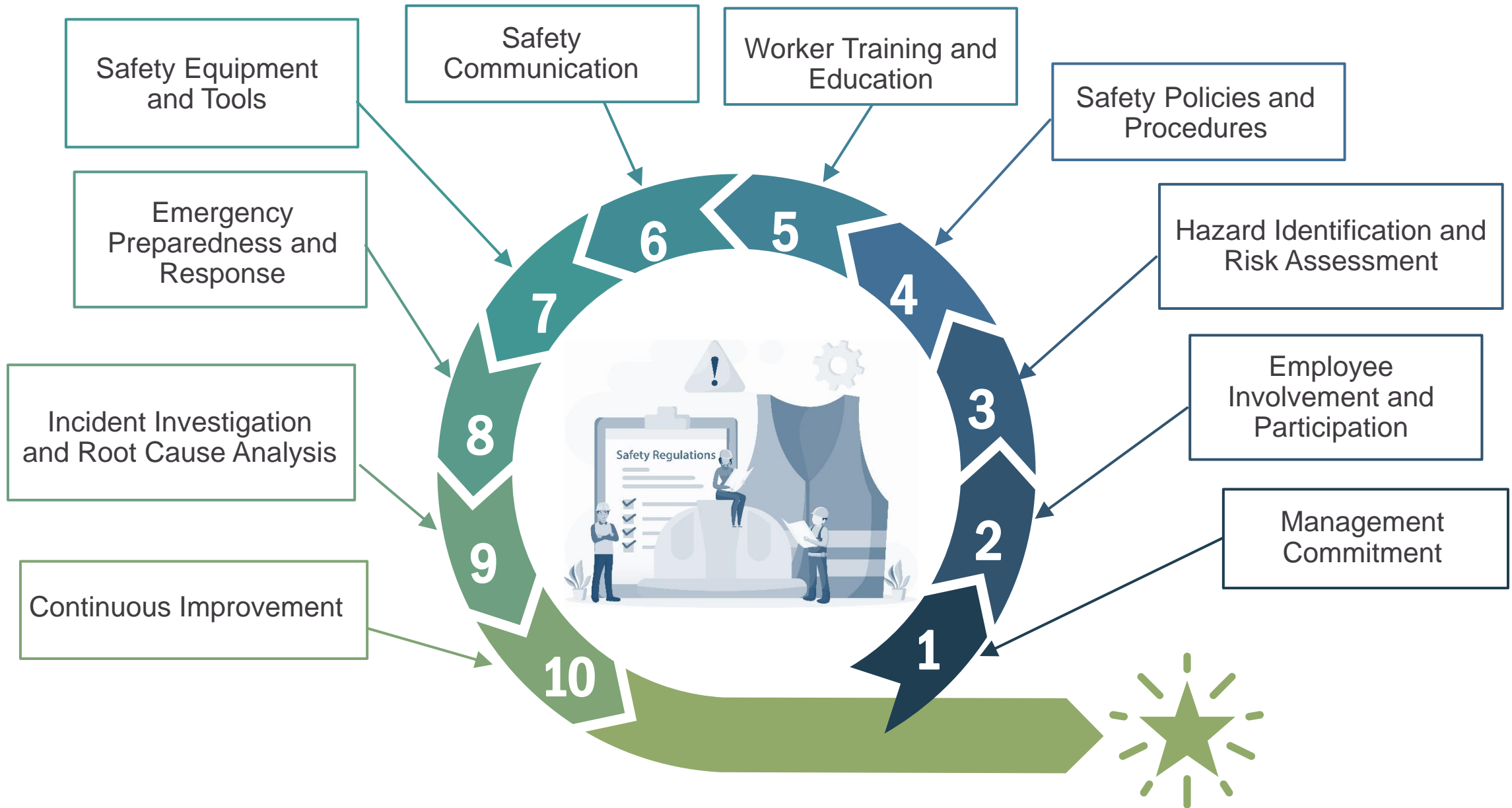
- Customer perception
- Social media blasts

ETHICS



“Right thing to do”

Elements of an Effective Worker Safety Program



Every Company Is on a Journey

DuPont Bradley Curve



What is a Safety Gap Analysis?

- A Safety Gap Analysis is a
 - **Systematic** process that
 - **Evaluates** an organization's current safety practices, policies, and procedures as
 - **Compared to** established standards and regulations.
- Key Goals:

Assess
compliance

Identify areas of
improvement in
safety practices

Enhance overall
safety performance
and manage
injuries/risk

Safety Program Applicability Review Tool - Example

Location	Perfect Electric Utility	Program Applicability Review	< Less than or equal to 5 = Priority 3																			
Assessors	Brooke Sinclair		6 to 11 = Priority 2																			
Date	October 15-20, 2024		Equal to or > than 12 = Priority 1																			
																			Updated	10/22/2024		
Type	Program	Regulatory Standard Reference	Applicability							3-Year Incident History				Written Program/Policy	Training/Certification Requirements	Competent Person Requirements A, U, C	Equipment or Other Inspections	PPE	Risk Priority Ranking			Overall Status
			Storeroom	Line Crew	3 Phase Meter Techs	Power Plant Maintenance	Substation Crew	System Operators	Office	Near Hit	Rec - Minor	Rec - Serious	Fatality	Required?	Required?	Required?	Required?	Required?	Likelihood	Severity	Risk	
GEN	Electrical Safety - High Voltage	29 CFR 1910.269	N	Y	Y	Y	Y	N	N	1			Y	Y	Y	Y	Y	4	5	20	Improper use of 3 way comm./Opened wrong breaker	
GEN	Fall Protection	29 CFR 1910.140	N	Y	N	Y	Y	N	N		1		N	Y	Y	Y	Y	4	5	20	Lack of inspection, Slipped while climbing	
GEN	Personal Protective Equipment	29 CFR 1910 Subpart I	Y	Y	Y	Y	Y	Y	N				N	Y	Y	Y	Y	4	5	20	No assessments	
CON	Aerial Lifts	29 CFR 1926.453	N	Y	N	N	N	N	N				N	Y	Y	Y	Y	4	5	20	No refresher training within 10 years	
CON	Traffic Control	29 CFR 1926.200 - 201	N	Y	N	N	N	N	N	1			N	Y	Y	Y	Y	4	5	20	Construction project in ROW, near hit reported	
GEN	Electrical Safety - Low Voltage	29 CFR 1910 Subpart S / NFPA 70E	N	N	Y	Y	N	N	N				Y	Y	N	Y	Y	3	5	15	No arc flash assessments	
GEN	Lockout/Tagout	29 CFR 1910.147	N	N	N	Y	N	N	N				Y	Y	Y	Y	N	2	5	10	Outdated written program	

1

2

3

4

5

Programs/
Regulations

Applicability

Incident History

Requirements

Risk Scoring

Type	Program	Regulatory Standard Reference
GEN	Electrical Safety - High Voltage	29 CFR 1910.269
GEN	Fall Protection	29 CFR 1910.140
GEN	Personal Protective Equipment	29 CFR 1910 Subpart I
CON	Aerial Lifts	29 CFR 1926.453
CON	Traffic Control	29 CFR 1926.200 - 201
GEN	Electrical Safety - Low Voltage	29 CFR 1910 Subpart S / NFPA 70E

Pro Tip: Start with high-risk programs

Applicability						
Storeroom	Line Crew	3 Phase Meter Techs	Power Plant Maintenance	Substation Crew	System Operators	Office
N	Y	Y	Y	Y	N	N
N	Y	N	Y	Y	N	N
Y	Y	Y	Y	Y	Y	N
N	Y	N	N	N	N	N
N	Y	N	N	N	N	N
N	N	Y	Y	N	N	N

Pro Tip:
Applicability =
Training plan

3-Year Incident History			
Near Hit	Rec - Minor	Rec - Serious	Fatality
1			
	1		
1			

Pro Tip: Use for injury trending and training updates

Written Program/ Policy	Training/ Certification Requirements	Competent Person Requirements A, U, C	Equipment or Other Inspections	PPE
Required? ▼	Required? ▼	Required? ▼	Required? ▼	Required? ▼
Y	Y	Y	Y	Y
N	Y	Y	Y	Y
N	Y	Y	Y	Y
N	Y	Y	Y	Y
N	Y	Y	Y	Y
Y	Y	N	Y	Y

Pro Tip: Create an annual compliance calendar

Risk Priority Ranking			Overall Status
Likelihood	Severity	Risk	Comments
4	5	20	Improper use of 3 way comm./Opened wrong breaker
4	5	20	Lack of inspection, Slipped while climbing
4	5	20	No assessments
4	5	20	No refresher training within 10 years
4	5	20	Construction project in ROW, near hit reported
3	5	15	No arc flash assessments

Pro Tip: Conduct risk scoring to target higher risk

OSHA's Top 10 Lists

Citations - CY2023

1. Fall Protection (C)
2. Hazard Communication (GI)
3. Ladders (C)
4. Scaffolding (C)
5. Powered Industrial Trucks (GI)
6. Control of Hazardous Energy (lockout/tagout) (GI)
7. Respiratory Protection (GI)
8. Fall Protection Training (C)
9. Eye and Face Protection (C)
10. Machinery/Machine Guarding (GI)

US Fatality Trends

Age	2020	2021	2022
<16	14	7	6
16-19	78	102	90
20-24	260	289	323
25-34	833	882	962
35-44	898	977	1,058
45-54	954	1,087	1,111
55-64	1,051	1,140	1,175
≥65	676	702	761
Total	4,764	5,190	5,486



Benefits of Conducting a Safety Gap Analysis

Aligns with minimum federal safety standards

Enhances employee safety

Improves efficiency and productivity

Reduces direct and indirect costs

Builds a positive reputation

Facilitates continuous improvement

More effective risk and litigation management



How Do I Get Started?

- 1 Conduct focused safety observations
 - PPE, equipment, tools, facilities, work conditions, & work practices
-

- 2 Review incidents
 - Where do we sustain injuries?
 - Do we receive near miss reports?
-

- 3 Review training
 - Who is assigned what training?
 - Is the training content thorough?
 - Do the frequencies make sense?
 - Am I solely relying on OQ?

- 4 Identify applicable safety programs (e.g., Electrical, HazCom, Fall Protection, Traffic Control, etc.)
-

- 5 Examine current documentation

Plans/
Procedures

Root Cause
Analysis

Job Safety
Briefings

Job Hazard
Analysis

How Do I Get Started?

6 Consider a safety program gap analysis

- Initial or in depth?
 - Internally or externally led?
-

7 Consider a team approach and engage your staff

- Employee Safety Committee?
 - Supervisory team?
-

8

Develop a roadmap of activities

- Focus on highest risk for injury first
 - Focus on “unknown” areas next
-

9

Track progress!



10

Celebrate success!

Additional Resources

- Federal Register Alerts - <https://www.federalregister.gov/my/subscriptions>
- OSHA's websites
 - FAQs for State Plans - <https://www.osha.gov/stateplans/faqs>
 - General Industry - <https://www.osha.gov/laws-regs/regulations/standardnumber/1910>
 - Construction - <https://www.osha.gov/laws-regs/regulations/standardnumber/1926>
 - Training Requirements by Standard - <https://www.osha.gov/sites/default/files/publications/osha2254.pdf>
 - Publications - <https://www.osha.gov/publications>
 - Compliance Assistance Quick Start - <https://www.osha.gov/complianceassistance/quickstarts/general-industry>
- FMEA Conferences, Webinars, Committees

Questions?

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