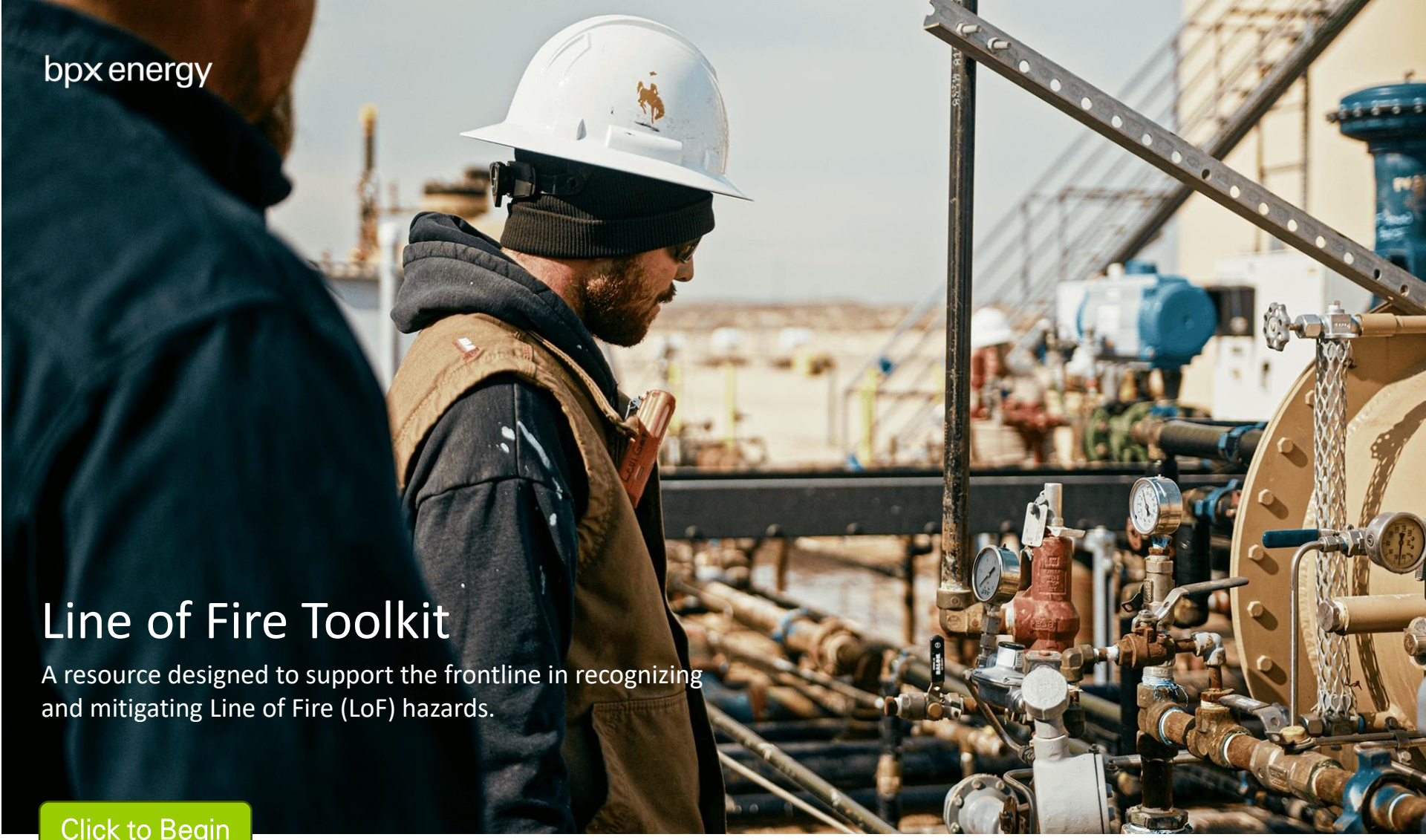


bpx energy

Line of Fire Toolkit

A resource designed to support the frontline in recognizing and mitigating Line of Fire (LoF) hazards.

Click to Begin

LIFE-SAVING RULES

In This Toolkit

What's inside?

Inside this toolkit you'll find valuable resources and tools designed to deepen your understanding of:

- Why we prioritize line of fire awareness at bpx
- The Life-Saving Rule (LSR) Line of Fire (LoF)
- Different line of fire hazards that exist in our work environments
- Tools you can use to protect yourself and others against line of fire hazards.

Who's it for?

This toolkit is designed for frontline leaders, HSE&C professionals, and frontline employees.

How do I use this toolkit?

Leverage the resources provided in the toolkit for your specific role to actively manage line of fire risks.

For example:

- **Frontline leaders –** Engage your teams in discussions during pre-job planning and toolbox talks using the provided materials. Reinforce key learnings from Safety Alerts and Flash Calls. Promote a speak-up and questioning attitude culture to identify hazards and abnormal conditions.
- **HSE&C professionals –** Ensure consistent messaging with the frontline by utilizing toolkit resources to reduce the likelihood of Line of Fire hazards through hazard identification and controls.
- **Frontline employees –** Frontline employees have a personal responsibility to:
    - Adhere to key actions outlined in each LSR and integrate key learnings into hazard identification during toolbox talks (TBT), job safety analyses (JSA), risk assessments (RA), and verifications.
    - Speak up and have a questioning attitude throughout work planning, execution, oversight, and rounds.

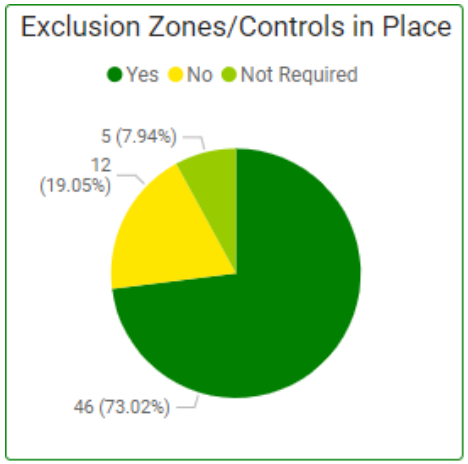


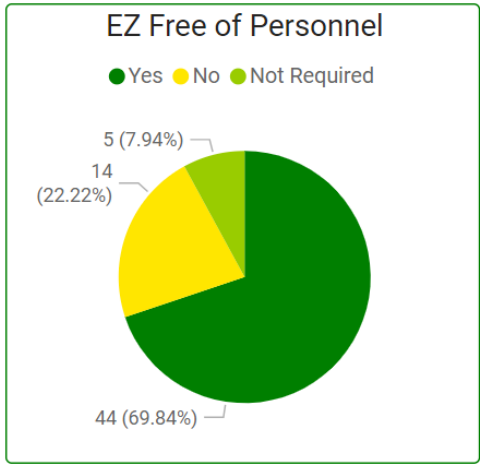
Line of Fire Hazards

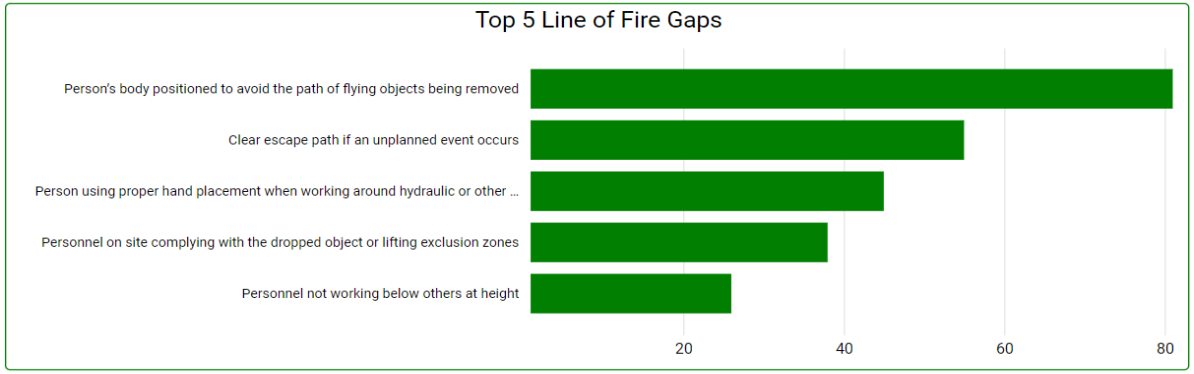
Why does bpx focus on the Life-Saving Rule (LSR) Line of Fire?

- In 2023, LoF gaps were mostly attributed to workers **standing within swing paths** (typically near hoists or forklifts), **placing hands in or near pinch points**, and **entering exclusion zones**.
- **85 out of 167 injuries were related to LoF or body placement**, with the majority stemming from improper hand placement and leading to hand/finger injuries.
- **12 dropped object incidents did not have exclusion zones in place**, increasing the potential risk of LoF injuries. Our focus must be on preventive controls.
- Risk assessment **verifications reveal gaps in identifying potential LoF/body positioning hazards** in JSAs.

Data through 1/1/2023 – 12/31/2023







LIFE-SAVING RULES



Life-Saving Rule

What is line of fire?

A simple definition is **being in harm's way**.

Line of fire injuries occur when the path of a moving object or the release of hazardous energy intersects with a person's body.

Line of fire typically relates to several activities:

- Lifting operations
- Working at height
- Moving equipment
- Energy isolation
- Use of tools

Line of Fire

Keep yourself and others out of the line of fire



- I position myself to avoid:
  - moving objects
  - vehicles
  - pressure releases
  - dropped objects
- I establish and obey barriers and exclusion zones
- I take action to secure loose objects and report potential dropped objects

LIFE-SAVING RULES



Line of Fire Hazards

Types of Hazards

- **Moving Objects** – Other objects moving toward or against the person
- **Body Positioning** – Location of person in relation to other objects in work environment
- **Placement or Movement of Body Parts** – Hand, foot, etc. placed in/moved to a location to be struck by or struck against an object.
- **Unexpected Release or Movement of Store Energy** – Stored energy is converted to kinetic energy with impact to person





Adopt A Questioning Attitude

Prevent line of fire hazards with a questioning attitude when planning work, oversight of work, rounds, TBT, and procedure reviews.

- **A questioning attitude feeds into** an accurate understanding of workplace situations.
- **Stop, look and listen**—proactively search for work situations that flag uncertainty.
- **Ask clarifying questions either in a group setting or as a lone worker**—gather relevant information. If you see any red flags, speak up and voice your concerns.
- **Leadership**— celebrate and encourage a questioning attitude,

How to Use the LoF Toolkit

Leaders

- **Engage** your teams in discussions during pre-job planning and toolbox talks.
- **Reinforce** key learnings from Safety Alerts and Flash Calls.
- **Encourage and recognize** employees who adopt a questioning attitude.
- **Be aware of LoF TRAT activities that require risk assessment.**

Frontline Employees

- **Review applicable procedures and SOPs** related to LoF activities.
- **Memorize key actions** for the LSR LoF.
- **Learn from events** by viewing Safety Alerts, Flash Calls and industry learnings.
- Understand **LoF verification questions.**
- Learn how you can prevent LoF incidents by **adopting a questioning attitude**.

Contractors

- **Know and apply** the LoF LSR.
- Understand bpx guidance **on performing a JSA as reflected in the CEM**.

Highly recommended resource

Actions & Expectations

Toolbox Talks & Safety Meetings

TBT & 5-Minute Talks

- LoF Moving Equipment
- LoF Lifting
- LoF Energy Isolation & Breaking Containment
- LoF Working at Heights
- LoF Tools & Equipment
- LoF General Awareness
- Guidance for Start of Shift/Pre-Tour Meeting

Presentations

- Adopting a Questioning Attitude
- Normalization of Risk
- Psychological Safety

SOPs/Policies/SV/JSA/TRAT

Policies

bpx Operating Manual

Applicable procedures:

- Lifting Operations
- Dropped Objects Prevention
- Energy Isolation
- Driving Safety

Self-Verification (SV)

- Line of Fire SV Questions

Standard Operating Procedures

- SOPS

JSA

- Verifying JSA Quality: *See SOP, Page 40*
- Hazard Recognition and Control

TRAT Activities

- Hot bolting / Odd bolting
- Well intervention on High Consequence (HCO) sites

See Operating Manual pages 1064-5.

Resources

Learnings

bpx Safety Alerts

- Overhead Line Strikes
- Power Infrastructure and Line of Fire
- Line of Fire
- Hand Injuries
- Hand Safety and Injury Prevention
- Safety Action Message: Jeter Manlift

Flash Calls

- Vehicle Safety and Line of Fire

Industry Learnings

- Line of Fire Sharing Library
- ADNOC Collapse of Material Storage

Visuals

Posters

- Line of Fire

Videos

- Could You Be In the Line of Fire?
- Looking for Hazards
- TEP Line of Fire Video
- What to do when heavy equipment strikes overhead powerline

Life-Saving Rules

- Life-Saving Rules LoF Intro Video

Contractors

Life-Saving Rules (LSR)

- bp Life-Saving Rules External Site
- Life-Saving Rules LoF Intro Video

Risk Assessment/JSA

- Contractor Expectation Manual (CEM)

See Risk Assessment/Job Safety Analysis (JSA), Page 21

See Guidance to Contractors on How to Perform a JSA, Page 27

Learnings

- Line of Fire Sharing Library

For questions or comments regarding the Line of Fire toolkit, contact HSE Communications.

LIFE-SAVING RULES

